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**GROWING TOGETHER** 

Sustainability Report 2014/15





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AAHK received a number of awards and recognition during the reporting period. Details are set out in the 'Appendices' section.



## ABOUT THIS REPORT

### **Report Profile**

This is the third annual sustainability report published by Airport Authority Hong Kong (AAHK). It covers the fiscal year 2014/15 that ended 31 March 2015.

This report provides a comprehensive account of AAHK's sustainability performance and management approach in 2014/15. It focuses on the issues that are most material to stakeholders, and how the Hong Kong International Airport (HKIA) contributes to the sustainable development of Hong Kong as an international and regional aviation hub. AAHK's stakeholders are those who are influenced by, have an influence over or have a vested interest in AAHK.

### **Report Scope and Boundary**

This report mainly covers AAHK's core business in Hong Kong over which it has direct management control. It does not include information on AAHK's joint ventures in the Mainland. However, where relevant, reference is made to AAHK's subsidiaries and outsourced operations. The report also explains how AAHK engages with its stakeholders and collaborates with its business partners in addressing sustainability issues and improving HKIA's overall sustainability performance.

This report is prepared 'in accordance' with the internationally-recognised Global Reporting Initiative (GRI) G4 Sustainability Reporting Guidelines and the Airport Operators Sector Disclosures: the Core option. Moving from GRI G3.1 to GRI G4 reflects AAHK's commitment to continuous improvement by requiring greater transparency and accountability. The content of this report has been informed by a materiality assessment, which included direct engagement with a wide range of stakeholders. Details are set out in the 'Materiality Assessment' section.

The GRI Materiality Disclosures Service has verified that the General Standard Disclosures G4-17 to G4-27 were correctly located in both the GRI Content Index and in the text of this report. Please refer to the 'GRI Content Index' section for details, including the references to the general and specific standard disclosures made in this report.

The performance data presented in this report is for the fiscal year 2014/15 unless otherwise stated. Where available, data for previous fiscal years has been included to facilitate comparison and analysis. Objectives and targets for the short-, medium-, and long-term are presented where relevant. The financial data used in this report was extracted from AAHK's audited consolidated financial statements for the year ended 31 March 2015. Other data is provided in accordance with the GRI G4 disclosure requirements unless otherwise stated. Standards and methodologies for compiling the data as well as explanations of any restatements are given where appropriate.

### Assurance

This report has been independently verified by the Hong Kong Quality Assurance Agency. Separately, AAHK's greenhouse gas (GHG) emissions data, as disclosed in this report, has been independently verified by SGS Hong Kong Limited.

## Your Feedback

We welcome your feedback on AAHK's sustainability management approach and performance. Please contact us via:

Online: online feedback form (Page 97)

Telephone: (852) 2188 7111

Email: corporatesustainability@hkairport.com

Fax: (852) 2824 0717

Mail: Environment Department, Airport Authority Hong Kong, HKIA Tower, 1 Sky Plaza Road, Hong Kong International Airport, Lantau, Hong Kong

# MESSAGE FROM THE CHAIRMAN

Dear Stakeholders,

I am honoured to carry on the work of my predecessors in strengthening Hong Kong as a centre of international aviation.

As we outline in the 'Economic Contribution' section of this report, we continue to be the world's third busiest international airport and busiest cargo airport. In fiscal 2014/15, passenger volume rose 6.6% to 64.7 million, flight movements increased 4.9% to 396,000, and cargo throughput grew 5.5% to 4.4 million tonnes. This growth comes at a cost — HKIA now operates at over 90% capacity and will soon reach saturation. There is an urgent need to expand HKIA into a three-runway system (3RS).

The expansion of HKIA is an investment in Hong Kong's future. As an international city with an externally oriented economy, not only is an efficient airport essential to finance, tourism and other pillars of economic growth, but air traffic growth also serves as





an important catalyst for Hong Kong's Gross Domestic Product (GDP) growth. Airports throughout the Asia Pacific region are expanding aggressively and AAHK must ensure that Hong Kong's competitiveness as an international business hub is not compromised by lack of capacity.

While rolling out our expansion plans to increase capacity, we continue to invest in upgrading existing facilities and new technology to maintain, and where possible, enhance the airport's efficiency and service quality. I realise however, that investment in hardware alone is not enough. We place great emphasis on having the best people to run the business. We will continue to work together with our business partners to recruit and retain the best talent for HKIA.

This is AAHK's third annual sustainability report. The GRI G4 Guidelines have given us a new opportunity to listen carefully to our stakeholders. The 'Materiality Assessment' section outlines the sustainability issues that matter most to our stakeholders and our response to their major concerns. We will continue to work closely with our business partners in the next phase of our growth. Sustainability remains central to maintaining the competitiveness of HKIA. On behalf of the Board, I pledge full support to management's efforts to progress towards sustainable growth.

**Jack So Chak-kwong** Chairman Hong Kong, September 2015

## MESSAGE FROM THE CEO

#### Dear Stakeholders,

I am very excited to have joined the management team of AAHK, and to contribute to our commitment to sustaining HKIA's position as a world-class airport and Hong Kong's gateway to the world.

This was a year of transition for AAHK. It marked changes in management, accompanied by some organisational restructuring in preparation for our future challenges. We took this opportunity to reflect on our plans in the light of changing market conditions to ensure that we maintain operational excellence for the years to come. Our new corporate strategy puts more emphasis on people and the local community. AAHK's ambition to embed a culture of sustainability at all levels of the organisation is reflected in the new corporate goals set for 2015/16.

After going through the most rigorous environmental impact assessment (EIA) in Hong Kong's history, we were pleased to obtain the Environmental Permit for the 3RS in November 2014. As we prepare for transition to the 3RS, we remain mindful of the need to maintain top-notch service standards and unsurpassed passenger experience, even as we face arduous capacity constraints. One of the major initiatives to address this was the establishment of the HKIA Technovation Board in February 2015 to drive systematic innovation and technology development at HKIA. This will not only enhance passenger experience but support HKIA's development into an innovative and smart airport in the long-run.

On the environmental front, our approach has been to provide easy to use platforms where we can work together with our business partners across the whole airport community to further reduce our environmental impacts. For example, we have worked with 46 business partners in the past five years to reduce HKIA's carbon footprint and we are on track towards achieving our airport-wide carbon intensity reduction target of 25% by the end of 2015. This is a major commitment under our pledge to make HKIA the world's greenest airport.

People are our greatest asset. We have begun a review of AAHK's human resources strategy; the first key step in this process was the creation of an Executive Director position for human resources. Changes have already been implemented in relation to remuneration, succession planning and talent development. These are further outlined in the 'People and Community' section of this report. AAHK is committed to recruiting



and retaining the best people and we will work hard to listen to and act on the concerns and aspirations of our staff. I want people to be proud to work at AAHK and contribute to the running of the region's best airport.

AAHK sees HKIA as more than a transportation facility. We are reinforcing the role of the airport as an important resource for the Hong Kong community. Our new approach will see the airport become an incubator for local start-ups to test technological solutions and a platform for local artists to showcase Hong Kong's arts and culture. We will further invest in the skills development of local people as part of a new community investment strategy. My aim is to strengthen HKIA's image as the Hong Kong people's airport.

In this report, you will read about the future challenges we face, but I am confident that HKIA will continue to give our city a long-term competitive edge and be a source of pride for the people of Hong Kong. I look forward to your continued support and to hearing your views.

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**Fred Lam Tin-fuk** Chief Executive Officer Hong Kong, September 2015



## ABOUT AIRPORT AUTHORITY HONG KONG

Established in 1995, AAHK is a statutory body that is wholly owned by the HKSAR Government and governed by the Airport Authority Ordinance (Chapter 483, The Laws of Hong Kong). Guided by the Ordinance and the objective of maintaining Hong Kong's competitiveness as a global and regional aviation hub, AAHK is responsible for the provision, operation, development and maintenance of HKIA, and may also engage in airport-related activities in trade, commerce or industry. AAHK is required to conduct its business according to prudent commercial principles and with due regard for the safe and efficient movement of aircraft, air passengers and air cargo.

### Vision, Mission and Core Values

AAHK's vision is to be a world-class corporation that leads airport management and aviation-related businesses and contributes to the prosperity of Hong Kong. To accomplish our corporate vision and sustainability targets, we and our partners in the airport business community operate in accordance with six core values:



Upholding these core values in every part of our daily operations as well as in our long-term business planning enables AAHK to deliver on its mission to:

- Uphold high standards in safety and security
- Operate efficiently with care for the environment
- Apply prudent commercial principles
- Exceed customer expectations
- Work in partnership with stakeholders
- Value human resources
- Foster a culture of innovation

### **Our Business**

		Unit	2014/15	2013/14	
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Operational	Passenger traffic	Millions of passengers	64.7	60.7	
Performance	Cargo throughput	Millions of tonnes	4.4	4.2	
	Aircraft movements	Thousands	396	377	
	Destinations	Number	180	179	
	Airlines	Number	105	106	
•• •• •• •• •• •• •• •• ••		• •• •• •• •• •• •• •• •• •• ••		• •• •• •• •• •• •• •• •• ••	
Financial	Turnover	HK\$ million	16,367	14,810	
Performance	EBITDA	HK\$ million	11,314	9,938	
	Profit attributable to the equity shareholder	HK\$ million	7,254	6,454	
	Hong Kong Profits Tax paid	HK\$ million	1,099	785	
•• •• •• •• •• •• •• ••	•••••••••••	• •• •• •• •• •• •• •• •• •• ••	•• •• •• •• •• •• •• •• •	• •• •• •• •• •• •• •• •• ••	
Workforce	AAHK employees	Number	1,472	1,372	
	People working at HKIA*	Number	~65,000	~65,000	

\* Based on the results of HKIA Workforce Survey 2013

Located on the island of Chek Lap Kok, HKIA currently operates two terminals and two primary runways on a site of 1,255 hectares. Served by 105 airlines that collectively reach 180 destinations, HKIA handled 64.7 million passengers and 4.4 million tonnes of cargo in 2014/15, setting new records for the airport. HKIA remains the busiest cargo airport and one of the top 10 busiest passenger airports in the world.

While AAHK employs 1,472 people, HKIA has a working community of about 65,000 people. Together, we conduct a range of business activities at the airport, including passenger services, cargo and aviation services, apron management, airfield operations, airport property and facilities management, airport safety and security, retail and advertising, and other terminal commercial activities. A diagram outlining the primary services for airport

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management and development and the responsible parties is set out in the 'Appendices' section.

AAHK partly owns Aviation Security Company Limited (AVSECO), which is our aviation security service provider, and SkyLink Passenger Services Company Limited, which provides passenger check-in services at various ports in the Pearl River Delta (PRD). AAHK wholly owns HKIA Precious Metals Depository Limited, which offers storage space and related services at HKIA.

Beyond Hong Kong, AAHK is involved in the operation and management of three airports in the Mainland via joint ventures: Shanghai Hongqiao International Airport, Hangzhou Xiaoshan International Airport and Zhuhai Airport.



#### **Business planning**

AAHK's business planning encompasses a series of plans to address HKIA's short- to long-term needs. These plans include a 20-year HKIA Master Plan which is reviewed and updated every five years, a rolling Five-year Business Plan, and a Three-year Work Plan (newly introduced by the CEO and endorsed by the Board in November 2014) with a corresponding Annual Plan on execution. The Board, through its committees, oversees the key projects and initiatives as articulated in the plans and provides steer, as necessary, to ensure that they are consistent with the changing business and operational needs of AAHK and the airport community at large. The CEO convenes regular meetings with other senior executives to monitor the progress of the Annual Plan.

### • The Annual Plan 2015/16 outlines nine focus areas of AAHK's business strategies and key projects •

•• ••	•• •• •• •• •• •• •• •• •• •• ••	•• ••	•••••••••••	•• ••	••••••••••
1	Addressing two-runway system (2RS) capacity constraint	2	Pursuing operational and service excellence	3	Planning and delivering the 3RS
•• ••		•••••			
4	Development of the North Commercial District	5	Providing a unique HKIA retail experience	6	Reinforcing HKIA's cargo leadership
7	Expanding HKIA's catchment area by capitalising on surrounding infrastructure developments	8	Re-branding of HKIA	9	Pursuing sustainable growth for the long-term
•• ••		•••••		•••••	

These focus areas reflect the issues of concern to our stakeholders, as evidenced in the stakeholder engagement exercise conducted as part of the materiality assessment process for developing this report. Please refer to the 'Materiality Assessment' section for more details.

For more details on the business planning and review process, please refer to the 'Corporate Governance' section of our Annual Report 2014/15 (Page 97).

A new corporate goals structure and performance measures were established for 2015/16 with the aim of driving balanced and sustainable business performance in the long-term interest of AAHK. To this end, people and community investment were set as key priority areas.

### **Commitment to External Initiatives**

AAHK actively participates in local and international associations that are aligned with its vision and core values, and/or are relevant to its business strategy and operations. It also endorses and subscribes to various external charters and principles that provide guidance or resources for best practices concerning issues relevant to HKIA, including safety, environment and corporate governance. AAHK values its involvement in and commitment to these external initiatives, particularly with regard to the learning and stakeholder engagement opportunities that each of them provides. Details of AAHK's memberships and endorsement of external principles and charters are set out in the 'Appendices' section.



## OUR APPROACH TO SUSTAINABILITY

### Sustainability Vision

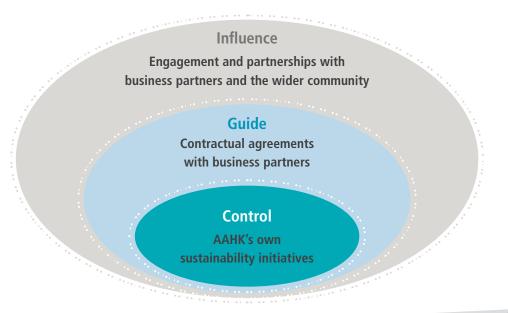
AAHK's sustainability vision is to strengthen HKIA's ability to operate and grow profitably in a changing and challenging economic, ecological, technological and social environment, while developing a robust culture of sustainability throughout the organisation.

## Our Approach

When considering our approach to sustainability, we take into account a number of factors, including businessrelated challenges, accountability to stakeholders, global aviation trends, law and regulations, and risk management.

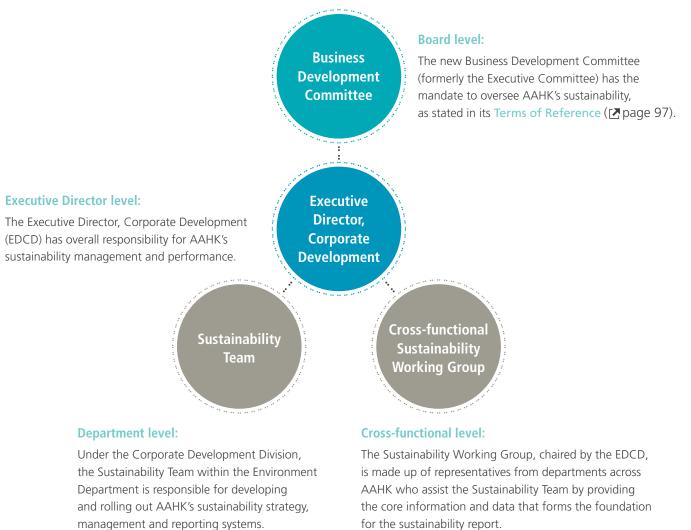
Given that AAHK's business model is to outsource many of the key functions of airport operation to franchisees,

tenants and Government departments, we have adopted a three-pronged approach to sustainability management. The principles of 'Control, Guide and Influence' reflect the different levels of control that AAHK exercises over the various aspects of the airport operation.



#### Sustainability management

Within AAHK, sustainability is managed through the following entities:



#### Sustainability reporting

AAHK's Sustainability Report 2013/14 was published in November 2014. It was independently verified by the Hong Kong Quality Assurance Agency and checked by the GRI which concluded that it fulfilled the requirements of GRI Application Level A+.

To prepare for reporting in accordance with the GRI G4 Guidelines, AAHK commissioned a study on best sustainability practices in other leading airports and multinational corporations around the world to identify improvement opportunities. A gap analysis against the GRI G4 disclosure requirements was also conducted. This highlighted the need to enhance our sustainability management and reporting systems as well as our sustainability performance. The findings were presented to AAHK's senior management in January 2015.

In February 2015, the Executive Committee of the Board approved the preparation of AAHK's Sustainability Report 2014/15 in accordance with the GRI G4 Guidelines to further enhance the credibility and relevance of AAHK's sustainability reporting and the robustness of its sustainability practices. Key improvement measures include conducting external stakeholder engagement to determine the priority of sustainability issues to be disclosed, commencing a supply chain management study and strengthening the governance of sustainability at AAHK.



# MATERIALITY ASSESSMENT

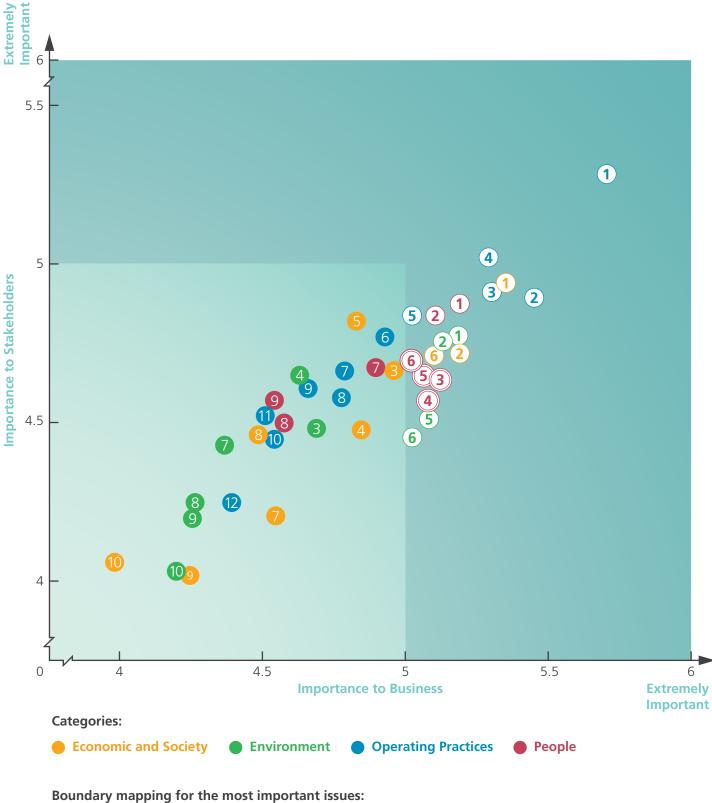
For the first time this year, AAHK directly engaged with both internal and external stakeholders as part of the materiality assessment process for developing this report. Materiality is determined by considering AAHK's most significant economic, environmental and social impacts, as well as the issues that are of most interest or concern to stakeholders. The process helped us to identify and prioritise the most important issues to be covered in this report.

## AAHK's Materiality Assessment Process



- AAHK compiled a list of 44 potentially relevant issues from various sources, including findings from ongoing engagement with stakeholders, internal policies and management reports, media opinions and trends analysis, and the GRI G4 indicators
- Conducted six focus groups (39 organisations, 62 participants) and three individual interviews to gather stakeholder views on the material issues
- Adjusted the list of relevant issues from 44 to 41 based on stakeholder feedback
- Conducted two online surveys (286 responses, 60.6% response rate) to rate the importance of each relevant issue from a stakeholder or a business perspective, using a scale of 1 to 6 (1 = not at all important, 6 = extremely important)
- Developed the materiality matrix based on the scores of the surveys
- AAHK's senior management reviewed the materiality matrix, set the threshold for materiality, and determined whether the impact of each issue was located inside or outside AAHK (boundary mapping)
- The threshold for materiality was set at a score of 5 (i.e. very important)
- As a result, 18 of the 41 issues, with an overall score of 5 or above from a stakeholder or a business perspective, were prioritised as the most important sustainability issues for AAHK to address and report on





### Materiality Matrix and Boundary Mapping

Boundary mapping for the most important issues

1 Inside and outside AAHK 3 Inside AAHK only

### • List of important sustainability issues •

The materiality matrix shows the 41 identified issues (as listed below) according to their importance to stakeholders and importance to business. The 18 issues ranked as the most important are in bold and identified with white icons on the materiality matrix.

## Economic and Society

### 1 Connectivity

- **2** Economic contribution
- 6 Labour shortage
- 3 Air cargo strategy
- 4 Branding and reputation
- 5 Infrastructure development
- 7 Financial management
- 8 Impacts of operation on communities
- 9 Community investment
- 10 Development of Lantau

### **Operating Practices**

- Airport safety and security
   Compliance with laws and regulations
   Capacity constraints
- **4** Contingency planning
- **5** Customer experience
- 6 Facilities management
- 7 Business partner engagement
- 8 Information security
- Innovation and technology
- 10 Human rights
- 11 Accessibility
- 12 Supply chain management

### Environment

- $\overline{}$
- 1 Environmental management
- 2 Air quality
- **(5)** Carbon and energy management
- 6 Waste
- 3 Green construction
- 4 Noise
- 7 Water
- 8 Biodiversity
- 9 Material use
- O Climate change

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### People

- **1** Ethics and integrity
- (2) Occupational health and safety
- **3** Retention and turnover
- **4** Succession planning
- **5** Attracting talent
- 6 Employee well-being
- **7** Training and development
- 8 Equal opportunities and diversity
- 9 Grievance mechanisms

## Comparison with 2013/14

The following table shows the main differences in the results of this year's materiality assessment compared to last year. The major contributing factors include the fact that we engaged with a much larger and more diverse group of stakeholders and adopted a more robust method of rating the importance of issues and developing the matrix. The results also reflect changes in airport operation and progress in the development of HKIA as well as wider sustainability trends in the past year.

#### Issues newly considered as most material

- Labour shortage
- Attracting talent
- Retention and turnover
- Succession planning
- Employee well-being
- Carbon and energy management
- Waste
- Compliance with laws and regulations

## most material\*

Issues no longer considered as

- Business partner engagement
- Impacts of operation on communities
- Green construction
- Noise

#### Issues renamed

- - Capacity constraints (from *Capacity*)
  - Customer experience (from *Customer service*)
  - Ethics and integrity (from *Ethics and bribery*)

These issues are still important to AAHK and, to a certain extent, are covered by the most material issues, e.g. AAHK engages with business partners on numerous issues to ensure the smooth operation of HKIA.

### **Response to Stakeholders**

This year, AAHK engaged with the following stakeholder groups to identify material sustainability issues based on their expertise, relationship to AAHK and their power to influence AAHK's decision-making process:

- Airport business partners
- Suppliers (including consultants and contractors)
- Employees
- Non-governmental organisations (NGOs) (including think tanks)
- Trade and industry associations (including professional and statutory bodies)

The stakeholder engagement exercise not only helped us determine the priority of sustainability issues but also to better understand stakeholder concerns, expectations and perceptions about our operation.

Six recurring themes emerged from the exercise leadership and strategy, capacity constraints, labour shortage, attracting and retaining talent, economic contribution, and environmental management. This report has been developed to reflect these themes, including disclosures on AAHK's approach to addressing the underlying issues, our major initiatives and achievements during 2014/15, and the key challenges and opportunities going forward.

AAHK will also review its longer-term strategy for addressing specific sustainability issues raised in the stakeholder engagement exercise and explore future opportunities for broader dialogue on AAHK's sustainability performance and reporting.



#### Stakeholders' views and AAHK's responses

What is AAHK's long-term strategy for sustainable business growth?



**Capacity constraints** and **labour shortage** are high-priority issues that already have an impact on the business operations of AAHK and its business partners and suppliers. The potential for adverse impacts on **efficiency, customer experience** and even **safety** are on the increase, and airport workers are under pressure. Stakeholders expect AAHK to be an advocate for the interests of the airport community and set expectations for addressing the challenges ahead.

We recognise the complex challenges facing HKIA and our leadership role in finding lasting solutions. We continue to adopt measures to enhance operational efficiency and alleviate labour shortage. We are also fully aware that we need to work together with the airport community to address these challenges.

Please refer to the **'Airport Growth'** (page 32), **'Operational Excellence – Innovation and Technology'** (page 51), and **'People and Community – Airport-wide Labour Challenges'** (page 76) sections.

AAHK employees are concerned that it is getting harder to **attract and retain the right talent**, and requested AAHK to review its human resources strategy, remuneration packages and performance appraisal system.

> AAHK has conducted a remuneration review to maintain market competitiveness in attracting and retaining talent. Please refer to the 'People and Community' section (page 70) and the 'Q&A with AAHK's Executive Director, Human Resources and Administration' (page 72).



• Stakeholders' views and AAHK's responses •

AAHK should communicate more effectively the **economic contribution** that HKIA makes to Hong Kong, and do more to address the needs of communities surrounding the airport.

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HKIA's economic contribution to Hong Kong is detailed in the **'Economic Contribution'** section (page 22). AAHK frequently communicates with it stakeholders through a variety of engagement channels, as detailed in the **'Stakeholder Engagement'** section (page 19). AAHK has also begun to review its approach to community investment, as detailed in the **'People and Community** – **Community Investment'** section (page 77).

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AAHK performs well in certain areas of **environmental management**, but needs to improve on issues such as waste management and biodiversity and further involve its business partners in the process if it is to meet its world's greenest airport pledge.

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The **'Environment'** section (page 56) details AAHK's strategy for achieving its ambitious goal of making HKIA the world's greenest airport and better engaging with its business partners on environmental issues. An airport-wide waste management strategy and a biodiversity strategy are being developed and will be completed in 2015/16.



## STAKEHOLDER ENGAGEMENT

Stakeholder engagement is an integral part of the airport's day-to-day operation and future development. AAHK engages with a wide range of stakeholders in order to better understand and respond to their needs, make better informed business decisions, and better manage the resulting impact of those decisions.

We identify stakeholders as those groups that interact with AAHK and are influenced by, have an influence over or have a vested interest in AAHK. Key stakeholder groups are those who have high vested or direct interest and high influence, particularly concerning issues that are most important to AAHK.

AAHK is committed to open and effective communication with its stakeholders. We adopt various engagement approaches to take into account the different types of stakeholders, engagement objectives and any existing engagement mechanisms and commitments.

Apart from organising our own stakeholder engagement activities, we actively participate in external engagement platforms and activities such as committees of industry associations and professional bodies, and regularly coordinate a number of liaison groups and committees to deal with specific issues, such as the Environmental Liaison Group to communicate with green groups, the Community Liaison Group for the Permanent Aviation Fuel Facility at Tuen Mun, and the Airport Transportation Liaison Group to improve staff transportation.

Examples of AAHK's stakeholder engagement can be found throughout this report:

- with **internal and external stakeholders** as part of the materiality assessment process for developing this report ('Materiality Assessment' section on page 13).
- with **business partners, the airport community and the wider aviation sector** to address environmental issues ('Environment Leadership and Engagement' section on page 60).
- with the **Airport Transportation Liaison Group** on improving staff transportation to and from the airport ('People and Community Airport-wide Labour Challenges' section on page 76).
- with **AAHK employees, business partners, contractors and passengers** to build a safety culture at HKIA ('Operational Excellence Airport Safety' section on page 45).

The table below sets out AAHK's key stakeholder groups, their key interests, and the regular engagement methods adopted.

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Stakeholder Groups	Engagement Methods	Key Interests
Airport business partners	<ul> <li>Regular and ad hoc meetings</li> <li>Committees and liaison groups</li> <li>Audits and inspections</li> <li>Drills, exercises and training workshops</li> <li>E-mails and circulars</li> <li>Environmental and community activities</li> <li>Sharing of survey results and intelligence</li> <li>Awards and recognition schemes</li> </ul>	<ul> <li>Airport planning and development</li> <li>Airport safety and security</li> <li>Business continuity planning</li> <li>Collaboration on application of new technologies</li> <li>Customer feedback and consumption trends</li> <li>Environmental issues and compliance</li> <li>Operational issues</li> <li>Staff transport</li> <li>Planning for major events</li> </ul>
Contractors and suppliers	<ul> <li>Regular and ad hoc meetings</li> <li>Audits and inspections</li> <li>Briefings and workshops</li> <li>E-mails and circulars</li> <li>Tendering process</li> <li>Performance review meetings</li> <li>Awards and recognition schemes</li> <li>Company website</li> </ul>	<ul> <li>Airport safety and security</li> <li>Ethics and integrity</li> <li>Environmental management</li> <li>Occupational health and safety</li> <li>Operational issues</li> <li>Service performance standards</li> <li>Supply chain management</li> </ul>
Employees	<ul> <li>Regular and ad hoc meetings</li> <li>Committees and liaison groups</li> <li>Conferences, briefings and town hall meetings</li> <li>Drills, exercises and training workshops</li> <li>E-mails, circulars and manuals</li> <li>Environmental and community activities</li> <li>Surveys</li> <li>Awards and recognition schemes</li> <li>Employee relations activities</li> </ul>	<ul> <li>Business continuity and strategic planning</li> <li>Corporate governance and internal controls</li> <li>Environmental management</li> <li>Legal compliance</li> <li>Occupational health and safety</li> <li>Operational issues</li> <li>Staff remuneration, benefits and well-being</li> <li>Staff transport</li> </ul>
Passengers	<ul> <li>Customer service counters</li> <li>Telephone response centre</li> <li>Airport Ambassadors</li> <li>Leaflets and exhibitions</li> <li>Company website and mobile apps</li> <li>Surveys</li> </ul>	<ul> <li>Connectivity</li> <li>Passenger experience</li> <li>Passenger safety</li> <li>Retail offers and incentives</li> <li>Terminal facilities and services</li> </ul>
Government departments and regulatory authorities	<ul> <li>Training workshops</li> <li>Audits and inspections</li> <li>Forums, committees and liaison groups</li> <li>Annual and interim reports and results announcements</li> <li>Working groups</li> </ul>	<ul> <li>Airport planning and development</li> <li>Airport safety and security</li> <li>Contribution to Hong Kong's economy</li> <li>Corporate governance and internal controls</li> <li>Emergency response and business continuity</li> <li>Environmental impact of the airport</li> <li>Financial performance</li> <li>Transportation and road management</li> </ul>

Stakeholder Groups	Engagement Methods	Key Interests
Legislative and district councillors, and political groups	<ul> <li>Committees and liaison groups</li> <li>Briefings and airport visits</li> </ul>	<ul> <li>Airport services</li> <li>Air quality</li> <li>Corporate governance</li> <li>Financial performance</li> <li>Noise</li> <li>Transportation and road management</li> </ul>
Industry associations and professional bodies	<ul> <li>Forums and exhibitions</li> <li>Briefings and airport visits</li> <li>Participation in sub-committees</li> <li>Regular and ad hoc meetings</li> </ul>	<ul> <li>Capacity constraints</li> <li>Climate change</li> <li>Customer experience</li> <li>Environmental impact of the airport</li> <li>Innovation and technology</li> <li>Market information</li> <li>Occupational health and safety</li> <li>Operational efficiency</li> <li>Procurement practices</li> </ul>
NGOs	<ul> <li>Regular and ad hoc meetings</li> <li>Liaison groups</li> <li>Briefings and airport visits</li> <li>HKIA Environmental Fund</li> </ul>	<ul> <li>Airport accessibility</li> <li>Airport safety</li> <li>Capacity constraints</li> <li>Environmental impact of the airport</li> <li>Occupational health and safety</li> <li>Operational efficiency</li> <li>Social and community issues</li> </ul>
Local community	<ul> <li>Briefings and airport visits</li> <li>AA Staff Club's social service group</li> <li>Community liaison groups</li> </ul>	<ul> <li>Air quality</li> <li>Food waste</li> <li>Impact of airport development</li> <li>Noise</li> </ul>
Media	<ul> <li>Workshops, briefings and airport visits</li> <li>Meeting with media heads and editors</li> <li>Press releases and publications</li> <li>Media hotline and email</li> <li>Annual and interim results announcements</li> </ul>	<ul> <li>Airport operation and development</li> <li>Corporate governance</li> <li>Environmental impact of airport developme</li> <li>Financial performance</li> <li>Noise</li> <li>Terminal facilities and services</li> </ul>



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# ECONOMIC CONTRIBUTION

HKIA, the majority of which are in technical, professional or managerial roles.

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### • KEY ACHIEVEMENTS IN 2014/15

- Passenger volume up 6.6%, flight movements up 4.9%, cargo throughput up 5.5%
  - 180 **destinations** served by 105 **airlines** operating at HKIA
  - Updated the **economic impact study** on HKIA's economic contribution to Hong Kong

### OBJECTIVES AND TARGETS

Conduct consultancy study on **air cargo development** at HKIA in 2015/16



Expand **HKIA's catchment area** by setting up remote city terminals in the PRD in 2015/16



Explore the feasibility of facilitating **intermodal passenger services** from the PRD via express railway and highway in 2015/16

## A Contribution of Air Cargo to Hong Kong's Economy

- Alaina Shum, General Manager, Aviation Logistics, AAHK

### **Q** How does air cargo contribute to Hong Kong's economy?

A The people and businesses of Hong Kong count on HKIA's efficient and reliable air cargo services on a daily basis. From time-sensitive documents and fresh foods to fashions and electronics, the air cargo that passes through HKIA each year represents about 40% of Hong Kong's total external trade value. This percentage is double what it was when HKIA opened in 1998.

## HKIA has been the world's number one airport for air cargo throughput since 2010. What lies behind this success?

HKIA has a number of competitive advantages: Hong Kong's free port policy and geographical location, state-of-the-art facilities, excellent cargo handling and security services, and sufficient cargo handling capacity. More fundamentally, Hong Kong people fully understand that time is money – and this drive for speed and efficiency can be found deep in every aspect of the cargo handling process. AAHK manages the airport's cargo services through franchisees to optimise land use and enable economies of scale.

Building strong partnerships and sustainable solutions are key success factors. Our airline partners play a critical role in strengthening HKIA's air cargo leadership, in particular the home-based carriers, airlines with freighter operation, and express integrators. The Cathay Pacific Cargo Terminal, which commenced operation in 2013, has added 2.6 million tonnes of cargo handling capacity and contributed to a significant growth in air transshipment. In addition, strong growth has been observed in the express cargo market. AAHK will continue to work closely with these key partners to provide an efficient and reliable platform for growth.

## **Q** How does AAHK work with different stakeholders to maintain the efficient and high standard of cargo operation?

A Through the Cargo Facilitation Committee chaired by AAHK, members from the air cargo industry meet quarterly to review air cargo handling operation and performance. A performance monitoring scheme has been set up by AAHK with each cargo terminal operator to ensure efficient performance standards. The Committee also recommends various initiatives to AAHK to further enhance and expand the airport's cargo management capabilities.



### Contributing to Hong Kong's Economy

International experience shows that investing in airports generates higher economic returns than other types of infrastructure. In addition to handling about 40%<sup>1</sup> of Hong Kong's total external trade value, HKIA contributes directly to Hong Kong's economy through employment and income generation both through:

- aviation services, such as airlines, air cargo terminal operators, airline catering operators, aircraft maintenance and other services operators; and
- non-aviation businesses at HKIA, such as retail, food and beverage, hotels, and conventions and exhibitions.

As part of the *HKIA Master Plan 2030* (P page 97), which was published in 2011, AAHK commissioned an Economic Impact Study to assess the potential impact of airport expansion on Hong Kong's economy. In early 2015, the study was updated for the 3RS based on updated traffic forecasts and cost estimates, and incorporated more recent statistical data.

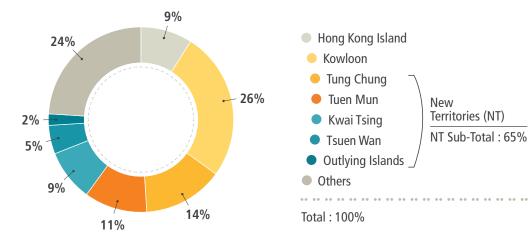
According to the economic impact estimates, the combined direct, indirect and induced value-added impact of aviation-related businesses in Hong Kong and non-aviation businesses at HKIA was HK\$94,241 million in 2012, equivalent to 4.6% of Hong Kong's 2012 GDP<sup>2</sup>. The relevant employment impact was 148,158 people employed, equivalent to 4.1% of Hong Kong's total employment in that year<sup>2</sup>.

As the airport operator, AAHK's economic contribution can be measured by its financial performance, including the dividend and taxes paid to the HKSAR Government, the wages and benefits offered to its employees, and the payments made to local suppliers and utilities suppliers as part of its operating expenses.

## **Creating Employment**

While AAHK employs about 1,500 people, more than 65,000 people are employed at HKIA in a wide variety of job categories. Based on the results of HKIA Workforce Survey 2013 conducted by AAHK, 65% of the workforce is

engaged in skilled jobs that require special knowledge and skills acquired through training, 12% in manual/low-skilled jobs that involve simple and routine tasks requiring physical effort, 14% in professional jobs, and 9% in managerial jobs.



### • Geographical distribution of individuals employed at HKIA<sup>3</sup> •

<sup>1</sup> 'Hong Kong Annual Digest of Statistics 2014', Census and Statistics Department, HKSAR Government

<sup>2</sup> 'An Update of Airport Master Plan 2030 Economic Impact Study for HKIA', Enright, Scott & Associates Limited, March 2015

<sup>&</sup>lt;sup>3</sup> Based on the number of companies that responded to the particular survey question, the results represent about 85% of the workforce at HKIA.

### Supporting Hong Kong's Economic Pillars

Hong Kong is an international city with an open market and externally oriented economy. The relationship between connectivity and GDP growth is closely linked. HKIA has a wider catalytic impact on Hong Kong's economy by supporting its four pillar industries - financial services, trading and logistics, tourism, and producer and professional services – all of which rely heavily upon the efficient flow of people and goods made possible by the airport.

HKIA has an increasingly important role in Hong Kong's trade and logistics industries. In 2014, Hong Kong's total exports by air were HK\$1,339 billion and imports by air were HK\$1,723 billion, representing 36.5% of total exports and 40.8% of total imports respectively<sup>4</sup>. However, the inward and outward movements of cargo by air (compared to by water, road and rail) in tonnes were just 0.8% and 2.2% respectively of the total tonnage discharged and loaded<sup>5</sup>.



Source: Census and Statistics Department, HKSAR Government (2013)

57.8% share of Hong Kong's GDP\*

It is widely recognised that air connectivity plays a crucial role in attracting foreign business. Global connectivity is particularly important to those sectors characterised by internationalised, high-value products and services that are also dependent on mobile workforces and face-to-face relations. Among them are the financial and business sectors, which are the cornerstone of Hong Kong's economy. In 2014,

7,585 multinational corporations had regional headquarters or offices set up in Hong Kong<sup>6</sup>.

As Hong Kong's air connectivity increases, the city becomes more attractive to foreign investment and the potential for business efficiency increases, resulting in a virtuous cycle of connectivity and economic growth.

<sup>&</sup>lt;sup>4</sup> Hong Kong's external merchandise trade statistics, Census and Statistics Department, HKSAR Government

<sup>&</sup>lt;sup>5</sup> Summary Statistics on Port Traffic of Hong Kong, Transport and Housing Bureau, HKSAR Government

<sup>&</sup>lt;sup>6</sup> 'Report on 2014 Annual Survey of Companies in Hong Kong Representing Parent Companies Located outside Hong Kong', Census and Statistics Department, HKSAR Government

### **Stakeholder Perspectives**

Cliff Sullivan, Chairman, Hongkong Association of Freight Forwarding and Logistics Ltd. (HAFFA):



HKIA provides excellent connectivity and is equipped with state-ofthe-art air cargo ground handling facilities which enable the logistics industry, a key economic pillar in Hong Kong, to meet the rising demand for airfreight. As competition in the region increases, HKIA must develop a strategy to strengthen its position as the airport of choice for the airfreight forwarding and logistics industry. The industry would also welcome the provision of essential cargo statistics by AAHK so as to facilitate decision makers to better analyse future freight demand and formulate business plans.

George Leung, Advisor, Asia-Pacific, The Hongkong and Shanghai Banking Corporation Limited:

The airport plays a major enabling role in the success of any business and financial hub. Efficient and convenient intercontinental and regional connections provide a significant incentive to companies considering where to locate regional offices and headquarters. If the development of HKIA is jeopardised by limited capacity, the city will begin to lose a key aspect of its competitive advantage.

## Air Connectivity

HKIA has firmly established itself as an international aviation hub due to a number of factors, including Hong Kong's favourable geographical location and the extensive air network it has developed over the years. From HKIA, one can reach half of the world's population within five hours' flying time.

As of 31 March 2015, 105 airlines connected around 180 destinations with HKIA. Taipei, Shanghai (Pudong) and Singapore were the three most popular short haul destinations with about 240, 220 and 160 weekly flights from HKIA respectively. For long haul routes, HKIA offered about 56 weekly flights to London Heathrow and 28 to New York and Los Angeles.

During the year, four new carriers – American Airlines, Siam Air, Vanilla Air and Jetstar Japan – began serving Hong Kong.

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## **Multi-modal Connectivity**

HKIA connects with local destinations via the Mass Transit Railway (MTR) Airport Express that takes 24 minutes to reach Central, franchised bus companies operating 45 routes and local tour coaches making around 700 trips a day from HKIA to various downtown destinations.

SkyPier offers about 98 ferry trips per day to nine ports in Mainland China and Macao while the Mainland coach service from Terminal 2 offers 550 scheduled coach trips to 110 Mainland cities and towns. Furthermore, SkyLimo provides a cross-boundary limousine service for passengers looking for point-to-point transportation with more privacy.

During the year, HKIA's catchment in Mainland China grew to encompass Chaozhou, Guangxi, Heyuan and Xiamen. The construction of key cross-boundary and local infrastructure projects, such as the Hong Kong-ZhuhaiMacao Bridge, the Guangzhou-Shenzhen-Hong Kong Express Rail Link (XRL) and the Tuen Mun-Chek Lap Kok Link, will provide HKIA with further opportunity to tap into the growth of the whole PRD region, pursue airport development plans, and improve local connections with the XRL for new sources of traffic.

### Case Study

## Enhancing Connectivity for Passengers from the Pearl River Delta Region

AAHK is always looking to enhance the intermodal travel arrangements in the PRD so as to provide passengers with a seamless travel experience. On 1 July 2015, Lianhuashan in Guangzhou became the ninth PRD port to connect to SkyPier. Upstream checkin service is available at seven ferry ports and three transport hubs in the PRD where passengers can check in for Hong Kong flights with participating airlines. Passengers are transferred directly to their flight upon arrival at HKIA without going through check-in formalities again.

In 2014/15, AAHK reduced the minimum connection time of the SkyPier service by 10 minutes by shortening the baggage and security process. Four mobile counters were added in SkyPier to increase passenger handling capacity. We also set up an official HKIA WeChat account for travellers to check their flight status and schedules of cross-boundary coach and ferry services easily and instantly. The number of passengers using SkyPier and cross-boundary land transport in 2014/15 increased to 2.8 million and 2.0 million respectively compared to 2013/14.

## Supply Chain

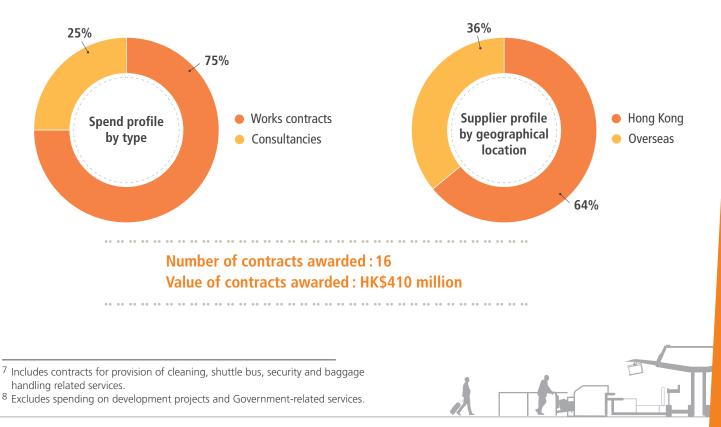
AAHK contributes significant economic value along its supply chain and procures a wide range of goods, equipment, materials and services, sourced both locally and overseas. AAHK's procurement is complex, with

Procurement for daily operations in 2014/15 •

procurement activities for daily operation and for development of the airport separately managed. The Procurement function is an integral part of the business process.

#### 9% 11% 51% Goods and materials Supplier profile Hong Kong Spend profile Labour contracts7 by geographical by type Overseas Operation and location maintenance services 38% 91% .. .. .. .. .. .. .. . Value of procurement<sup>8</sup>: HK\$2.6 billion

### Procurement for development projects in 2014/15



As a statutory body wholly owned by the HKSAR Government, AAHK is one of the procuring entities under the Agreement on Government Procurement of the World Trade Organization (WTO GPA). The object of the WTO GPA is to provide for open and fair competition amongst domestic and foreign suppliers, contractors and service providers. This implies that for procurement under the pre-defined scopes of the GPA (from approximately HK\$4.8 million for general goods and HK\$60 million for construction works), AAHK must openly invite offers without any differentiation of local and overseas suppliers, or country of origin. In this regard, AAHK publishes tender notices and award information of relevant tenders on its website (Page 97) and is required to submit annual statistics reports under the GPA Article XVI: 4(b) to the Committee on Government Procurement, reporting the number and value of contracts awarded as well as the country of origin of products and services purchased.

The fundamental values and principles underlying AAHK's procurement and tendering process are value for money, transparency, and open and fair competition. AAHK has established policies and practices for supplier selection which take into consideration a number of factors including cost, quality, technical performance and delivery. AAHK has also established a corporate-wide Green Procurement Policy to integrate environmental considerations into the procurement process.

All capital works projects include a green airport design strategy, which sets out key environmental indicators to optimise environmental efficiency in the construction and operation of the works at the project design stage, as well as minimising the project's environmental impact over its life cycle. Environmental management is also one of the factors in the prequalification of contractors and technical assessment of works tenders. All contractors are required to implement an environmental management plan to deal with potential environmental impacts arising from the execution of the works in compliance with statutory requirements, including commitments in any EIA Report and Environmental Permit relating to the works.

Similarly, on labour issues such as health and safety, AAHK has established tender and contractual requirements such as the submission of safety plans in tenders, a contractor safety offence points system, prohibiting the use of materials that are deleterious to health and safety, and the submission of health and safety management plans in contracts to explain how the supplier will handle health, hygiene and safety matters.



### Supply chain sustainability

AAHK is in the process of developing a more robust framework for managing supply chain sustainability. The following actions are planned for the next five years:

> **Revise AAHK's procurement** Revamp the existing policy and communicate green procurement its procurement values and policy principles Establish a supplier's code of practice, covering economic, social and environmental aspects Review specification, contract terms and conditions related to environmental aspects Embed sustainability performance criteria in the products, materials and services selection process **Develop** a supplier assessment framework Streamline and automate to include sustainability procurement activities matters and grievance

> > from the supply chain

### Case Study

### Launch of ePROS

In November 2014, AAHK launched ePROS, an electronic tendering system which enables suppliers to receive tender documents and submit offers online. The web-based system enables the tendering process, from supplier registration, enquiry, invitation and submission of tenders, evaluation and archiving, to be conducted in a paper-less environment. In addition to enhancing process efficiency, ePROS brings about environmental benefits by significantly reducing paper consumption and eliminating transportation of tender submissions to AAHK's office.

The ePROS was launched in April 2015. As at July 2015, 665 suppliers were registered on ePROS and 470 tenders had been submitted using ePROS. Please visit the ePROS website (IZ page 97) for more details.

HKIA is fast approaching its maximum capacity as Hong Kong's air traffic demand continues to rise. There is a pressing need to develop our airport into a three-runway system (3RS) so that it can continue to serve the people of Hong Kong and strengthen the city's regional and global competitiveness. While the economic and social contributions of the 3RS are widely understood, AAHK also conducted the most extensive EIA study in Hong Kong's history to identify the potential environmental impacts of the 3RS and, where necessary, formulate measures to avoid, minimise and mitigate the potential impacts to acceptable levels.

# AIRPORT GROWTH

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### • KEY ACHIEVEMENTS IN 2014/15

- West Apron Expansion completed in July 2015 with 31 aircraft parking stands added
  - **3RS Project** received Environmental Permit from the Director of Environmental Protection and affirmation from the Executive Council of HKSAR Government of the need for the 3RS

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### OBJECTIVES AND TARGETS

- **Midfield Development** scheduled for completion by the end of 2015 to handle 10 million passengers per year
  - **3RS Project** commence works after the Executive Council's authorisation of the proposals under the Foreshore and Sea-bed (Reclamations) Ordinance and the Town Planning Ordinance, and complete in eight years

### A Expanding HKIA into a Three-Runway System

- Wilson Fung, Executive Director, Corporate Development, AAHK

#### **Q** Why is there an urgent need to expand HKIA?

First of all, we have to appreciate that HKIA is a critical piece of infrastructure that brings business, jobs and convenience to the people of Hong Kong. HKIA's two-runway system is currently operating at over 90% capacity and will reach its maximum practical capacity in 2016 or 2017. Flight movements in 2014 revealed that the actual growth is four years ahead of forecast. This increasing demand for air travel is closely connected to the healthy economic development of our city.

Over the years, AAHK has carried out major enhancement works to expand and upgrade airport facilities to increase handling capacity and improve service quality for both aircraft and passengers on the ground. However, the bottleneck is in the runway, and expanding HKIA into a 3RS is the long-term solution to relieving our current capacity constraints.

## • What is the scale of the 3RS project and how will it address capacity constraints?

A The scale of the 3RS project is comparable to building a new airport next to the existing one, and it represents the largest and highest-budget single construction project in the city since the establishment of the HKSAR. Major facilities include a new runway, taxiways and aprons, a new passenger concourse, an expanded Terminal 2, an automated people mover system, a baggage handling system, a comprehensive new road network and new transportation facilities.

Upon completion of the project, HKIA will be able to serve 30 million additional passengers annually as forecast in the *HKIA Master Plan 2030*. The new concourse and the Terminal 2 Expansion could be further developed if necessary, which would accommodate a further 20 million passengers. While we continue to move ahead with the 3RS project, we have also begun working on the *HKIA Master Plan 2035* to map out the long-term development needs of HKIA.

## **Q** How is AAHK striking a balance between airport growth and environmental conservation?

As we see it, the balance is struck through an open and formally structured collective decision-making process to which the entire community subscribes. Hong Kong's statutory EIA framework serves as a useful tool in this respect. For the 3RS project, AAHK has prepared the most extensive EIA ever conducted in Hong Kong, culminating in the granting of an Environmental Permit by the Director of Environmental Protection in November 2014. Under the conditions of the Environmental Permit, AAHK will adopt a comprehensive set of measures to manage environmental impacts during the design, construction and operation of the 3RS – more details are covered in this section.

## Strategy for Growth

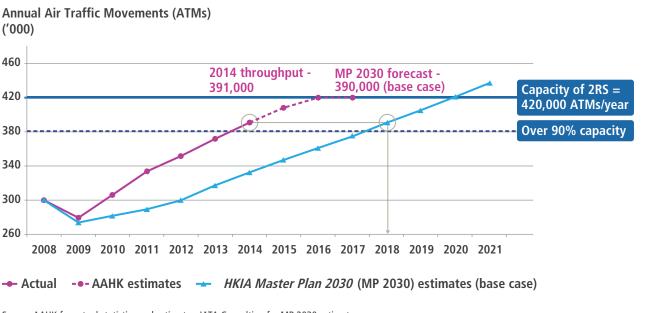
With rising air traffic demand, HKIA faces increasing challenges brought by capacity constraints of the existing 2RS, coupled with labour shortage faced by the aviation and logistics industries in Hong Kong.

While the expansion of existing facilities and provision of new facilities, such as the Midfield Development and Terminal 1 Annex Building, will address ground handling capacity, building the 3RS is the long-term strategy to address runway capacity to meet the air traffic demand by 2030 and beyond.

## **Stakeholder Perspectives**

Dr Peter Lam, Chairman, Hong Kong Tourism Board:

Excellent connectivity with the rest of the world plays an important part in upholding Hong Kong's position as a world-class travel destination. Connecting with 180 destinations, HKIA brings visitors from around the globe to Hong Kong. The airport is also the first point of contact between visitors and the city. It therefore plays a crucial role in showcasing the best of Hong Kong – efficiency and superb service quality. To maintain Hong Kong's status as the region's leading travel destination and to better serve the needs of visitors, it is necessary to keep enhancing the capacity, facilities and services of the airport.



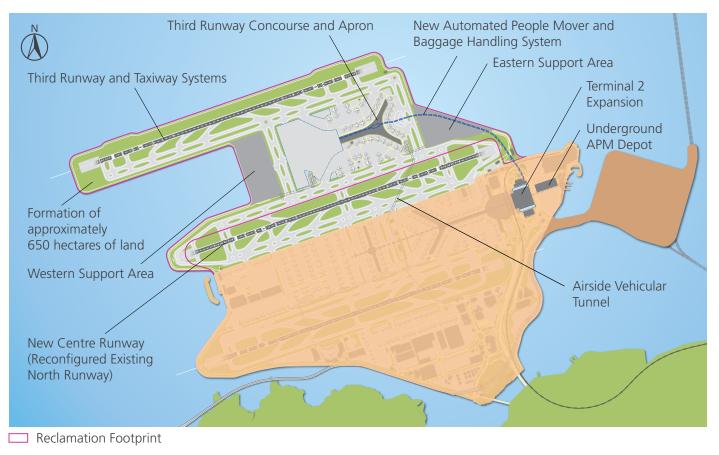
Source: AAHK for actual statistics and estimates; IATA Consulting for MP 2030 estimates

## Planning and Delivering the 3RS

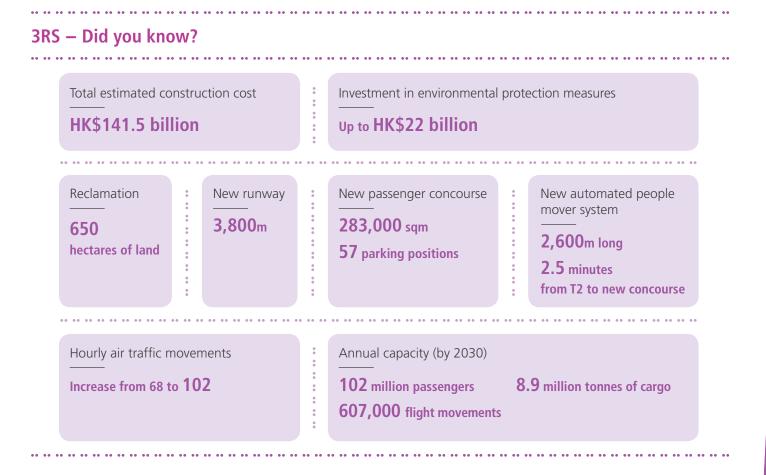
In November 2014, Director of Environmental Protection of HKSAR Government approved the EIA Report of the 3RS project and issued an Environmental Permit. In March 2015, the Executive Council affirmed the need for the 3RS. Since then, AAHK has been working towards completing all necessary 3RS-related statutory and administrative procedures for the commencement of reclamation after the Executive Council's authorisation of the proposals under the Foreshore and Sea-bed (Reclamations) Ordinance and the Town Planning Ordinance.



#### 3RS: More than just a third runway



Note: Planned layout subject to future changes



## **Stakeholder Perspectives**

Professor Raymond So, Dean, School of Business, Hang Seng Management College:



Strong air traffic growth and stiff competition among airports in the region is putting pressure on HKIA to maintain its leading edge as a premier aviation hub. Our airport needs to have the appropriate infrastructure or we increase the risk of losing traffic to nearby airports. Once we lose them, we will lose them forever. Building the 3RS is the best solution. AAHK's EIA Report makes it clear that the 3RS project will affect the environment. However, rather than adopting a "do nothing" approach for the sake of the environment, we should undertake sustainable economic development.



#### **Environmental impact and mitigation measures**

The EIA study is a key component of the 3RS project and was the most extensive EIA ever conducted in Hong Kong. The EIA was undertaken by an experienced team of local and international experts who spent two years assessing the potential environmental impacts of the project across 12 key aspect areas.



The EIA Report concluded that all potential impacts could be reduced to an acceptable level, subject to AAHK adopting more than 250 measures to avoid, minimise, mitigate and/or compensate for the potential impacts. Following the granting of the Environmental Permit, AAHK has been proactively taking forward its plan to fulfil the commitments made in the EIA Report and to comply with the respective requirements stipulated in the Environmental Permit granted under the EIA Ordinance.

Prior to the construction works, AAHK will focus on various mitigation measures in 2015/16, which include:

- Preparation for commencing the reclamation works

   using non-dredge methods, including deep cement mixing
- Setting up a Marine Ecology Enhancement Fund for the conservation of marine life, particularly the Chinese White Dolphin (CWD) within Hong Kong and Pearl River Estuary waters



• Setting up a Fisheries Enhancement Fund to support the fishing industry and enhance fisheries resources in western Hong Kong waters, especially the Lantau waters

AAHK will continue its engagement and promotion efforts to strengthen the public's understanding of the need and urgency of the 3RS as well as matters of particular interest to the public such as the environmental issues and financial arrangements. Please visit the HKIA website (P page 97) for details.

Please refer to the 'Environment' section for more details on AAHK's environmental management approach and performance.



## Medium-term Measures to Meet Air Traffic Growth

AAHK has invested over HK\$12.5 billion in new facilities to meet medium-term air traffic growth and to maintain service quality and operational efficiency at optimum levels.

#### West Apron expansion

In July 2015, the West Apron expansion was completed. In addition to a cross-runway vehicular tunnel and related facilities, this project added 31 aircraft parking stands, including 10 maintenance stands and nine cargo stands, which substantially increased aircraft parking capacity on both the maintenance and cargo aprons.

#### **Midfield Development**

The Midfield Development is a major project to address capacity constraints under the 2RS. The first phase of the development is scheduled to be completed by the end of 2015. This phase comprises a 105,000-square-meter, five-level Midfield Concourse (MFC) equipped with 20 new parking stands that is connected to Terminal 1 by an extension of the automated people mover. With the capacity to serve an additional 10 million passengers each year, the MFC will make a significant contribution to HKIA's passenger handling facilities and increase the percentage of aircraft that can be bridge-served. The scheme design for the second phase of the development, which will provide 10 remote full service passenger wide-bodied aircraft parking stands, was completed in 2014. The second phase is targeted for completion in 2017/18.

#### **Terminal 1 capacity enhancement**

While the Midfield Development is expected to relieve the pressure on concourse facilities, AAHK will enhance the handling capacity of passengers and baggage in Terminal 1 to maintain the current service standards. The enhancement works will provide capacity for additional facilities such as baggage reclaim carousels, check-in and security screening facilities and additional passenger services such as retail and catering outlets. Construction is expected to begin in Q2 2016/17 and be completed in phases by Q2 2019/20.



## **Stakeholder Perspectives**

Ir Ryan Chak, Chairman of The Hong Kong Institution of Engineers – Young Members Committee (Session 2014-15):

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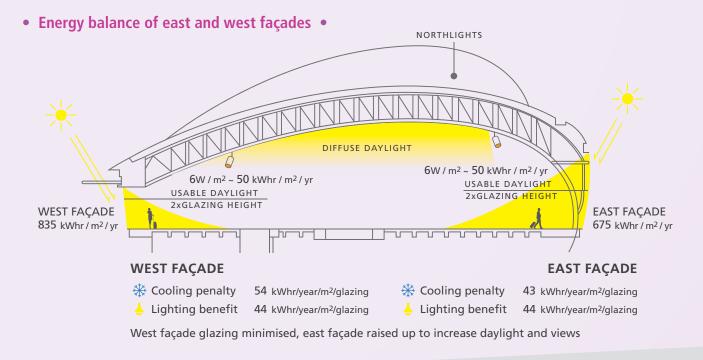
The Young Members Committee of The Hong Kong Institution of Engineers organised a visit to the Midfield Concourse in March 2015. Our young members were inspired by a number of green features and renewable energy facilities. For example, the chiller plant makes use of treated grey water and collected rainwater for cooling. This helps to save fresh water and reduces the cost of constructing a long transportation pipe for sea water. With a total area of over 1,200 square meters, the rooftop solar panels provide a sustainable supply of electricity for the concourse. Overall, we had an inspiring and informative visit which helped us understand the integration of environmental considerations into infrastructure development.

## Case Study

## Green Airport Design - The Midfield Concourse (MFC)

The construction of the new MFC illustrates AAHK's ongoing efforts to integrate environmental considerations into its strategy for airport growth. The Midfield Concourse Development has received a BEAM Plus Provisional Gold rating and will undergo final assessment upon building occupation.

The sustainable solutions incorporated for energy use and water use are illustrated below.



## **Energy Use**

Energy modelling of the MFC shows lighting energy accounts for almost 30% of energy consumption. The design of a good natural daylight system will reduce artificial lighting demand. The MFC is built along a northsouth axis with long façades on both the east and west side allowing daylight to enter through vertical glazing.

Due to lower annual solar heat gains on east-facing façades in Hong Kong, it is possible to increase the glazed area on the east to admit more daylight, at a relatively low solar heat gain penalty. Hence, the east façade of the MFC has been raised up to increase daylight and views while the west façade glazing has been lowered. Performance is further enhanced by incorporating skylights on the roof that face due north. These skylights can block the majority of direct sunlight from the south but allow diffuse light to enter from the north. Intelligent daylight and occupancy controls work in parallel to further optimise performance.

Furthermore, a shading hierarchy has been adopted to reduce solar heat gain, thereby lowering energy consumption by the cooling system.

#### Water Use

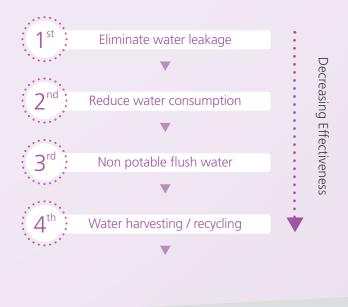
A sustainable water strategy is adopted for the MFC which covers demand reduction, grey water recycling and condensate water harvesting. The aim is to reduce potable water consumption by 30% compared to typical Hong Kong consumption.

Demand reduction is mainly supported by the use of sea water flushing and water-conserving sanitary fittings. Treated grey water and condensate water will be reused in the cooling system of the MFC to further reduce potable water consumption.

#### Shading hierarchy



#### Sustainable water strategy



AAHK leverages innovation and technology, engages with the airport community and relevant industries, and invests in understanding passenger needs and expectations in order to enhance operational and service excellence. Despite the city's ever-growing aviation demand putting pressure on the airport's capacity, we remain firmly committed to operating a world-class airport that provides passengers with a safe, efficient and enjoyable airport experience.

# OPERATIONAL EXCELLENCE

## **KEY ACHIEVEMENTS IN 2014/15**



4.85 injuries per million passengers



4.85 ASQ overall satisfaction score



**Y** 

Established the **HKIA Technovation Board** to drive innovation and technology development at HKIA

## **OBJECTIVES AND TARGETS**



Plan and execute safety culture programmes across HKIA



Build technological infrastructure on the airside to **enhance** operational efficiency



Further establish the **HKIA Innovation Centre** to test prototypes and innovative technologies applicable to HKIA



## Enhanced Baggage Handling with STACK@EASE

- Steven Yiu, Acting General Manager, Airfield, AAHK

## **Q** Can you share with us any new initiatives to enhance HKIA's baggage handling system given the increasing pressure on capacity?

Every day, over 1,800 staff handle more than 80,000 pieces of baggage at HKIA and, as expected, plenty of physical effort is involved in the process. In order to maintain a reliable and efficient baggage handling system that meets passenger expectations, we must also ensure the health and safety of the staff that handle the increasing volume of passenger baggage. Therefore, AAHK recently conducted a one-month trial programme with STACK@EASE, a flexible baggage loading aid that reduces the need for heavy lifting and enhances the loading efficiency and productivity at the departure laterals.

#### **Q** How does STACK@EASE work and what are the benefits?

Check-in baggage weighing up to 32 kilograms is delivered by conveyor to the designated departure lateral in the baggage hall and then loaded manually onto the baggage containers for transportation to the aircraft. In a typical shift, a baggage handling team loads the passenger baggage of four wide-bodied aircraft flights, with an average of 200 to 300 pieces of baggage per flight. The compact and user-friendly STACK@EASE is a moving arm that enables staff to safely and easily load the baggage from the lateral to the container with the exertion of only two kilograms of force. This effectively reduces the risk of strain and manual handling injuries, thus benefiting the staff's physical health. As a result, manpower efficiency is enhanced and female staff can also be employed for the task.

#### **Q** What was the outcome of the trial and what will happen next?

A The trial results and feedback from stakeholders confirmed that STACK@EASE can significantly reduce the risk of injury from manual lifting. Moreover, it is compatible with all types of baggage containers being used in HKIA, making it both a cost- and operationally- effective solution. In the coming two to three years, AAHK will invest HK\$165 million to install over 160 units of the loading aid, covering all the laterals in the baggage handling system.

Another great advantage is that the Radio Frequency Identification (RFID) reader can be integrated into the STACK@EASE system, thereby providing a closer read range and better read rate of the RFID baggage tags, which ultimately enhances the effectiveness of the Automatic Baggage Reconciliation System.

## **Airport Safety**

Ensuring the safest possible environment for HKIA's 65 million passengers and 65,000 airport workers is a responsibility AAHK takes very seriously. The Airport Composite Safety Index is the performance indicator that HKIA uses to track the combined injury rate of passengers and staff. In 2014/15, the injury rate at HKIA dropped to 4.85 injuries per million passengers, which represented an overall reduction of around 35% compared to 2009/10.



#### Airport Composite Safety Index\*

\* Staff and passenger injury rate (per million passengers)

#### Aerodrome Safety Management System (ASMS)

AAHK has established a comprehensive ASMS to identify and control safety hazards that may pose risks to aircraft, passengers and staff, and to drive continuous improvement in safety performance. The ASMS, which is part of the Civil Aviation Department (CAD)'s aerodrome licensing requirements, is implemented according to the newly published International Civil Aviation Organization (ICAO) Annex 19 – Safety Management.

Overall structure of the ASMS					
System					
ASMS	<ul> <li>Provides an airport-wide framework for aerodrome safety management and comprises four key elements:</li> <li>Safety policy and objectives</li> <li>Hazard identification and risk management</li> <li>Safety promotion</li> <li>Safety assurance</li> </ul>				
Procedures	• • • • • • • • • • • • • • • • • • • •				
Corporate Safety Management Procedures	• Defines management procedures necessary for the effective implementation of the ASMS				
Corporate Safety Technical Procedures	<ul> <li>Defines technical safety processes for analysing risk or for ensuring safe work procedures for high risk activities</li> </ul>				
Operational Documents	• • • • • • • • • • • • • • • • • • • •				
Safety Management Plans	<ul> <li>Defines how the ASMS is implemented with regard to different areas of operation</li> </ul>				

#### Building a safety culture

Building a safety culture is vital to the continuous improvement of safety performance at HKIA. AAHK's safety promotion is carried out at three different levels: building a robust safety culture amongst AAHK employees; providing clear guidelines and encouraging the safe conduct of business partners and contractors; and raising awareness of safe behaviour among passengers.

#### • Key initiatives in 2014/15 •

•• •• •• •• •• •• •• •• ••			
AAHK staff	2014 Safety Climate Assessment		
	• In August and September 2014, AAHK conducted its biennial Safety Climate Assessment to assess perceptions of and attitudes towards safety among AAHK staff. There was a slight drop in the mean score of the Safety Climate Assessment from 3.50 in 2012 to 3.49 in 2014. Although a score between 3 and 4 is considered satisfactory, the result reveals that further initiatives are required to strengthen the safety culture among our staff.		
	In-house Safety Training		
	<ul> <li>AAHK conducts regular safety training which includes fundamental and specific in-house training and the monthly E-Safety Awareness Workshop (E-SAW) to raise the safety awareness and knowledge of AAHK staff.</li> </ul>		
Airport	HKIA Retail Shops and Catering Outlets Safety Campaign		
community	• A series of competitions focusing on fire safety and good housekeeping, and a safety briefing and quiz were held for retail shops and catering outlets at HKIA.		
	Airfield and Baggage Hall Safety Campaign		
	• AAHK organised a range of activities such as safety talks, and poster design and video competitions to enhance the safety awareness of ramp workers.		
	2014/15 Airport Safety Recognition Scheme		
	<ul> <li>AAHK organises this annual scheme to recognise employees of AAHK and business partners, individually or as a team, who have contributed to airport safety through their good behaviour or suggestions. Organisations achieving safety targets and delivering sustainable safety performance are also commended.</li> </ul>		
	<ul> <li>In 2014/15, a total of 12 organisations received the Corporate Safety Performance Award and 217 individuals/groups received awards for Role Model Safety Behaviour, Accident Prevention Measures, Best Safety Supervisor and Good Safety Suggestion.</li> </ul>		
Passengers	Passenger Safety Campaign		
	• In July 2014, AAHK launched a Passenger Safety Campaign across HKIA, during which a series of safety programmes were organised, including a safety promotion booth displayed at the Meeters and Greeters Hall between January and March 2015, and the "Do-Do" safety mascot that shared safety information with passengers and other airport users.		

## **Stakeholder Perspectives**

Raymond So, Managing Director, Hong Kong Airport Services Ltd (HAS):

Ensuring airport safety requires joint efforts across the entire airport community. Through the Ramp Safety Surveillance Programme initiated by AAHK in June 2014, HAS carried out joint inspections with AAHK at various locations. Cases were reviewed at meetings arranged by AAHK and discussed among other ramp operators for raising safety awareness in the workplace.

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AAHK provides suitable personal protection equipment for employees commensurate with the health hazards they are exposed to, such as noise, airborne pollutants and other hazardous substances. AAHK has implemented various measures to reduce air emissions at the apron, e.g. stipulating emission requirements for all airside vehicles and promoting the use of electric vehicles (EVs) and electric ground service equipment (EGSE). AAHK has also developed the HKIA Stepped Response Plan which aims to protect the health of all airport users from public health risks such as pandemic diseases and includes appropriate screening system to prevent the import and/or export of health risks via HKIA.

## Case Study

## Safety on the Ramp 2014/15

The increase in air traffic and hence in ramp activity has led to the rising risk and frequency of ramp-related accidents. To address this, AAHK undertook a number of initiatives in 2014/15.

Firstly, a new ramp safety handbook outlining rules, guidelines and recommendations was published for airlines and ramp operators. The Airside Driving Offence Points Scheme and Airside Safety Demerit Point Scheme were reviewed to enhance ramp discipline. The Foreign Object Damage (FOD) prevention programme was enhanced to include a quarterly apron FOD walk and a "no littering" campaign in the apron area.

AAHK also conducted intensive safety audits to check the compliance with procedures and the safety discipline of staff, supplemented with a surveillance programme and weekly joint inspections with ramp operators. A yearly Ramp Safety Recognition Award Ceremony was held to award individuals and teams making outstanding contributions to ramp safety.

Last but not least, AAHK has further improved the safety of the aircraft line maintenance staff under adverse weather by mandating the use of wireless headsets for communicating with the cockpit crew under Amber or Red Airport Lightning Warnings and by refining the aircraft pushback arrangement under the Red Airport Lightning Warning.



## **Airport Security**

HKIA fully complies with the Hong Kong Aviation Security Programme (HKASP) under the Aviation Security Ordinance as well as the global standards for airport security as specified by ICAO. Security at HKIA is achieved through management systems and procedures developed by AAHK and implemented by AVSECO, our aviation security service provider.

#### Roles and responsibilities for airport security



AVSECO (Service Provider) Manual

Implement an ISO 9001-certified Integrated Management System to ensure the quality of aviation security services

Effective security at HKIA is ensured through a multistakeholder approach. AAHK chairs the Airport Security Committee, which comprises members from Government departments, Tenant Restricted Area operators, airlines and AVSECO, and provides a forum for the monitoring and review of security controls and procedures at the airport. The Aviation Security Authority, through its executive agent CAD, conducts security audits, tests, surveys and inspections on a regular basis to ensure AAHK's compliance with the requirements of the HKASP and effective rectification of any deficiencies.

#### Key initiatives in 2014/15



Extended the baggage screening system, which incorporates the latest computed tomography technology to produce cross-sectional images of a scanned object, to the remote transfer facility and the MFC.



Installed long-range CCTV cameras to enhance security surveillance capabilities for the protection of the Airport Restricted Area.

## **Business Continuity and Contingency Planning**

AAHK proactively assesses and prepares for potential disruptions and crises that may affect the operation of HKIA. AAHK has put in place systems and processes to identify, manage and minimise the associated risks. Because the nature of the risks involved changes over

time, AAHK's business continuity management processes must remain dynamic.

AAHK's approach to business continuity and contingency planning is as follows:



#### Validation drills and exercises in 2014/15

	No. of drills / exercises / sessions	No. of participants	Objective
Emergency response and business continuity drills and exercises	30	2,800	Validate emergency response arrangements and coordinate airport community response
Training and workshop sessions	69	1,574	Ensure airport community members are familiar with contingency measures and handling procedures
Targeted training sessions	21	193	Strengthen the response capability of home-based carriers and ground handling agents in emergencies and business continuity processes
Summer blow exercise	1	750	Test HKIA's coordinated disruption preparedness and response capabilities during the typhoon season

### **Case Study**

## Taking Control of Rapid Recovery from Adverse Weather

Adverse weather is a common concern for airports around the world. While airport operations are often affected, airport operators can minimise the impact by ensuring a rapid and smooth recovery after disruption.

Firstly, AAHK has been working closely with the airport community to strengthen HKIA's ability to prepare for and respond to potential disruption, particularly when there is an expected increase in extreme weather events. For example, AAHK is working together with the Hong Kong Observatory and CAD to establish an early warning system and to assess the impact of adverse weather on airport operation.

Secondly, when inclement weather causes major disruption, AAHK takes a more proactive role in coordinating the allocation and deployment of resources. This was most evident in the recent severe weather event on 23 and 24 May 2015. Under persistent lightning and heavy thunderstorms, apron operations were intermittently suspended for 701 minutes to protect ground staff and passengers. AAHK activated a number of contingency measures, including deploying its own staff at the Air Traffic Control Tower to coordinate flight departures closely with CAD and exercising the Centralised Aircraft Tractor Deployment Procedure to take over the prioritisation of deployment of tractors and ground crews from line maintenance operators to facilitate aircraft towing and pushback arrangement.

Last but not least, AAHK maintains timely and effective communication with all relevant parties, including the airlines, ground and ramp services agents, Government departments, public transport operators, retail and catering outlets in the terminal and passengers, to ensure that they have a comprehensive understanding of the situation and to disseminate critical information.

## Innovation and Technology

Innovation and technology is an important driver for operational excellence. AAHK is exploring various advanced technological solutions to enhance operational efficiency and address other operational issues relating to safety and manpower. The following technological infrastructure on the airside has been planned and will be built over the next few years:

## GPS روچی

- Introduce airport-wide GPS tracking on vehicles – mandate GPS installation in around 3,500 airside vehicles and mobilised equipment
- Safety: Enhance safety through automatic surveillance
- Productivity: Through traffic analytics, identify improvement areas to relieve bottlenecks

Timeline: Project to commence in 2015/16, implement the first phase by the end of 2015

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## 

- Install an additional 100 CCTVs on passenger and cargo aprons and 16 in the baggage hall
- Strengthen apron and baggage hall real-time operation management and facilitate resources management

Timeline: Installation to complete by the end of 2015

## ا MiŁi

• Expand WiFi coverage on the apron to facilitate mobility solutions for business partners to increase productivity

.. .. .. .. .. .. .. ..

• Lay the crucial infrastructure for Airport Collaborative Decision Making (A-CDM)

Timeline: Project to commence in 2015/16 and complete in 2016/17

## **Case Study**

## Improving Operational Efficiency through Airport Collaborative Decision Making (A-CDM)

A-CDM is a methodology aimed at improving the overall operational efficiency of the airport, with a particular focus on the aircraft turn-around and pre-departure sequencing process. The concept is based on the Euro-Control (the European Organisation for the Safety of Air Navigation) "16 A-CDM milestones" approach.

The A-CDM system at HKIA was developed by CAD in 2008 and launched for trial use in 2012. Over 500 users from 36 organisations, including AAHK, the airlines and ramp operators, are now using information of the A-CDM system in daily manpower and resources allocation and in monitoring the status of flight arrivals and departures.

Since June 2013, AAHK and CAD have had several rounds of thorough discussion on the implementation and development of A-CDM. It was decided that AAHK would take over the A-CDM from CAD in 2015/16 in order to realise the full benefits of the system, e.g. in enhancing flight punctuality and network efficiency, reducing runway taxiing time, fuel consumption and carbon emission, and improving airport capacity utilisation. It is common practice among airport operators in Europe and Asia to implement the system because of the need for committed involvement of all airport stakeholders to achieve the potential benefits aforementioned.

The scope of the project will include the takeover of the operation and maintenance responsibilities of the A-CDM (CAD version) and the implementation of A-CDM (AAHK version) including maintenance and support services with enhancement options. The project will take place in three phases, starting from 2015. AAHK will work with CAD and the airport community on the optimal implementation of the system over the next few years.

## **Customer Experience**

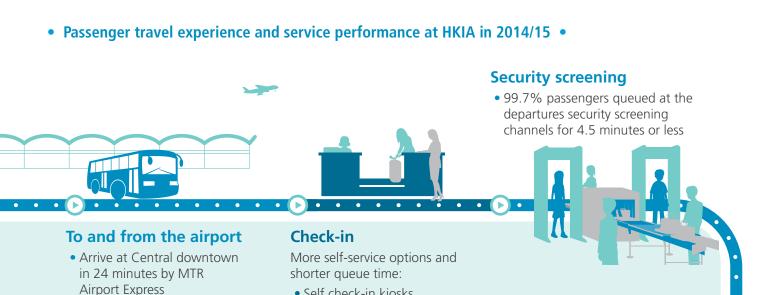
AAHK is committed to building new capacity and continuously improving customer services and facilities to meet passenger needs and enhance their experience at HKIA.

In February 2015, AAHK's Customer Services Department was subsumed under the Terminals Department to create greater synergy between terminal operations and customer services, given that terminals are where customers spend most of their time at HKIA.

Throughout the year, AAHK organises customer service campaigns and training to foster a customer-focused culture across the airport community. A new initiative, "Airport Friends" was launched in December 2014 to establish a platform for passengers and airport users to share comments and suggestions on HKIA's existing facilities and services. So far, a total of three on-site/ online surveys have been conducted with over 1,000 participants, focusing on the technology applications and facilities at HKIA. This initiative will help AAHK learn more about passengers' service requirements and benchmark its facilities and services against other airports. The annual Customer Service Excellence Programme award ceremony, held in July 2014, recognised over 300 airport staff who excelled in customer service. Six individuals and three teams from different business partners were honoured with Individual Excellence Awards and Corporate Excellence Awards respectively. A new Cross-Company Excellence Award was introduced to recognise the collaborative efforts of different organisations operating at the airport.



AAHK will further enhance the customer experience by organising arts and culture programmes such as exhibitions, demonstrations, cultural booths, passenger engagement activities, performances and entertainments to showcase the history, heritage and diversity of Hong Kong to local and international travellers.



- 45 franchised bus routes
- Around 700 local tour coach trips per day
- Self check-in kiosks
- Mobile boarding pass services
- "Home print bag tag service"

#### **Immigration**

• 100% of departing Hong Kong residents and 99.8% on departing visitors queued for less than 15 minutes at immigation

#### **Boarding**

• Began a trial of "Personalised FIDS" (Flight Information Display System)

• 87.3% of passengers embark and disembark by air bridge

#### Dwell time, dining, shopping

- Over 280 retail shops and 80 catering outlets
- Relaxation corner

• • •

- Nursing rooms being refurbished
- Art and culture exhibitions and performances
- Festive entertainments

#### Arrivals

- New customer service counter in the Meeters and Greeters Hall
- Airport Ambassadors stationed throughout the airport
- Minimum connection time between flights is 50 minutes\*

#### **Baggage Delivery**

- 92.8%: first bag delivered to baggage reclaim within 20 minutes
- 94.5%: last bag delivered to baggage reclaim within 40 minutes

\* This is based on the time required for baggage unloading from the arrival flight, sorting and screening through the baggage handling system, then loading onto the departure flight. It also includes the transit of passengers from the arrival level, through security screening, and to the departure gate.

• • •

#### **Customer satisfaction**

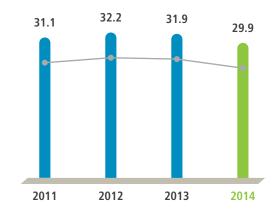
While passenger volume rose 6.6% from 2013/14, to 64.7 million, passenger satisfaction increased from 4.84 to 4.85 in 2014, according to ACI's Airport Service Quality (ASQ) Survey.



<sup>\*</sup> According to ACI's ASQ Survey (score out of 5)

In February 2015, AAHK established the HKIA Technovation Board consisting of the CEO and members of senior management to drive systematic innovation and technology development at HKIA. The aim is to provide superior passenger experience, leverage HKIA as

#### Index of complaints received • per million passengers



a platform to nurture local products, brands and research and development, and support HKIA's long-term vision as an innovative and smart airport. More details are set out in the 'People and Community' section.

## Case Study

## Leveraging Technology to Enhance Passenger Experience

In 2014/15, AAHK adopted a number of new information technology (IT) solutions to enhance the passenger experience at HKIA.



## "HKG My Flight" Mobile App

HKIA produced the "HKG My Flight" mobile app in March 2013 to provide passengers with real-time flight information. In 2014/15, the mobile app underwent a major upgrade. The revamped app now gives airport users access to a wider scope of information, including passenger guides, transport guides to and from HKIA, and an updated map of various airport facilities.

## Personal Flight Information Display System (FIDS)

AAHK has begun a one-year trial of "Personalised FIDS" by installing three kiosks in the landside and airside areas of Terminal 1, at which passengers can check their flight status by scanning their boarding pass or entering a flight number.



## Check-in Technology

In November 2014, AAHK, working with Air France and KLM, launched the "Home Print Bag Tag Service" at HKIA which enables passengers to print their luggage tags at home and simply drop their bags at the airline counter when they arrive at HKIA. In addition, AAHK is trialling the use of mobile check-in agents, which can help speed up the check-in process and reduce queuing times.

## **Real-time Arrival Passenger Monitoring System**

AAHK has developed a real-time arrival passenger monitoring system which helps to project the number of arrival passengers by making use of passenger data provided by airlines. With this system, AAHK can work with the Immigration Department to arrange a better manpower deployment plan according to the projected number of arrival passengers, and thereby reduce queuing times.

## **Trolley Tracking Trials**

AAHK has conducted trials of technologies such as WiFi tags, RFID tags, and video analytics to track the availability of baggage trolleys at staging areas. This helps to improve the availability of trolleys for passenger use.

## Lost and Found System

On average, there are 20,000 cases of lost and found items at HKIA each year. AAHK has enhanced the lost and found handling system and procedures to allow front-line staff to upload photos and a detailed description of found items into a central database as soon as they are discovered. This has boosted the recovery rate of lost items to 36% in 2014/15, up from 26% in the previous year.

機場失物認領處 Airport lost & found

## Service Accessibility

AAHK is committed to providing barrier-free facilities that enable convenient and equal access for people with special needs. Since HKIA opened in 1998, AAHK has implemented and improved various accessibility services, including dedicated drop-off areas and accessible parking space for special needs, two-level customer service counters, enhanced help-phone services, audio signals for escalators and walkways, ramps at the departures and arrivals areas, additional tactile guide paths, auto-sliding doors at unisex toilets, and dedicated channels for special needs at security screening and immigration clearance. In 2015/16, AAHK will install Braille maps on departures kerbs and safety guard rails under escalators for the visually-impaired and enhance the audio signal and level indicator for lifts to further improve accessibility.

The HKIA website (Papage 97) and mobile application "HKG My Flight" were both recognised at the Web Accessibility Recognition Scheme 2015 co-organised by the Office of the Government Chief Information Officer and the Equal Opportunities Commission. The scheme encourages organisations to adopt website features that provide greater accessibility to online information and services for different groups, including people with disabilities.



# ENVIRONMENT

The development and operation of HKIA creates a range of environmental impacts. These include changes in land use, consumption of natural resources, disposal of waste, and carbon, air and noise emissions, all of which may influence human and ecological health and well-being. Many of these impacts are directly measurable and, taken together, represent the 'environmental footprint' of HKIA. AAHK is committed to using best practice environmental management, and particularly to working closely with airport business partners to accelerate the rate of footprint reduction.



- CO2 22.4%\* reduction in HKIA's carbon intensity compared to the 2008 baseline
- Completed the **installation of 100,000 LED lights**, saving 18.2 million kWh per year of energy consumption
  - Launched the auxiliary power unit (APU) ban to reduce emissions from aircraft at frontal stands

1,255 tonnes of food waste diverted from landfill

## OBJECTIVES AND TARGETS

- Ø
  - Upgrade AAHK's existing **Environmental Management System** in line with ISO 14001:2015 and consider certification by 2017



Develop **future carbon reduction targets** for five and 20 years, and the associated reduction strategies for HKIA in 2015/16



Complete a **comprehensive waste management study** in 2015/16 to develop a long-term waste management strategy for HKIA

\* The 2008 emission factor as provided by CLP Power Hong Kong Limited, AAHK's electricity provider, was used in the calculation to enable year-to-year comparison of emissions from purchased electricity.

## A Multi-stakeholder Collaboration to Reduce Environmental Impact

- Mike Kilburn, Senior Manager, Environment, AAHK

## **Q** What role does collaboration with the airport community play in reducing the environmental impact of the airport?

As the airport operator, AAHK has a clear responsibility to take the lead. But with a team of 1,500, we can only do so much in reducing the environmental footprint of an airport with a workforce of 65,000. In order to accelerate the rate of reduction, we need to work with our business partners as we have done with the HKIA Carbon Reduction Programme – over 60% of the airport's emissions come from 46 of our airport business partners. It's also important to note that the support and public commitment from top management and senior government officials has been essential to the success of the programme. We are currently exploring how the lessons learned from this first collaborative approach can be further adopted in tackling other aspects of our footprint, such as air emissions and waste.

## **Q** AAHK has limited ability to control the environmental practices of the airport community. It is even more limited when it comes to the aviation industry. How does AAHK use its influence to drive improvement in environmental performance at HKIA and beyond?

A Sometimes it is necessary to elevate an issue to a higher level and engage with a wider group of stakeholders in order to solve it. A good example is AAHK's approach to encouraging the separation and recycling of aircraft cabin waste. When we first approached the airlines about this, we were told that they would not do it just for HKIA, as it was operationally difficult to follow different procedures at different airports. Recognising these concerns, we began working, first with the Airports Council International (ACI) Asia-Pacific Regional Environment Committee (REC), and then with the ACI World Environment Standing Committee (WESC) and finally with the International Air Transport Association (IATA), the airlines' industry body, to develop a set of cross-sectoral recommended practices for managing aircraft cabin waste. This document is now in the final drafting stages, and once published, we hope it will provide a framework for improving cabin waste management at HKIA, as well as other airports worldwide.

## Approach to Environmental Management

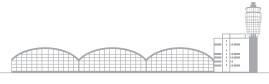
AAHK is committed to using best practice environmental management to minimise HKIA's environmental footprint. The underlying objectives go beyond cost reduction and resource efficiency to securing the airport's social license to operate – the public's acceptance and approval of the airport's operation and development. AAHK recognises that there is increasing public scrutiny on environmental issues in Hong Kong, particularly on development projects that may have negative environmental impacts, and that the associated risks can be costly. It is therefore important to not only demonstrate that AAHK's commitment to environmental management leads to continuous improvement in environmental performance, but to proactively engage with stakeholders and the wider public in the process to build trust and credibility.

In the stakeholder engagement exercise conducted for the development of this report, the environmental issues identified as being most important to our stakeholders were: environmental management, carbon and energy management, air quality and waste.



In May 2012, AAHK pledged to make HKIA the world's greenest airport. The strategy to achieve this is based on the recommendations from an independent Green Airport Benchmarking Study conducted in 2013/14 and AAHK's Five-Year Environmental Plan (the Plan), which was upgraded from the previous three-year plan in order to better match AAHK's business planning cycle.

The Plan sets out a range of environmental footprint reduction measures in respect of 11 key environmental aspects. These are climate change/carbon reduction, energy saving, green procurement and retailing, air quality, waste management, water usage, ecology and biodiversity, engagement, noise, new development, and environmental management system.



## **Stakeholder Perspectives**

Edwin Lau, Head of Community Engagement & Partnership, Friends of the Earth (HK):

Taking a flight or buying goods shipped by air have certain environmental impacts not limited to greenhouse gas emissions. Airport operation requires the support of catering, logistics and many other services that put pressure on the environment. AAHK has shown foresight in setting environmental goals that aim to lower its environmental impacts. However, as air traffic continues to increase, we need to consider the growth limit of our city so as to maintain a well-balanced and sustainable society.

## Leadership and Engagement

AAHK regularly engages with its business partners at HKIA, the airport community and the wider aviation sector to address environmental issues, particularly where collaboration can accelerate the rate of footprint reduction. The key engagement channels are the Airport Community Environmental Forum and the ACI regional and global environmental committees.

#### **Airport business partners**

AAHK engages with airport business partners through the Airport Community Environmental Forum. In 2014/15, four meetings were held, including a visit to Hong Kong EcoPark to review recycling practices and test drives of new EVs. Airport business partners were also invited to share their experiences in adopting new technologies at HKIA, such as the use of solar-powered passenger stairs and electric loaders by Jardine Air Terminal Services (JATS) and the GPS for fleet management by Hong Kong Aircraft Engineering Company (HAECO).

#### **Aviation industry**

The ACI Asia-Pacific REC brings together airports in the Asia-Pacific region to solve common environmental issues. AAHK continues to actively support the committee through the participation of AAHK's Senior Manager, Environment, Mike Kilburn, who was elected as its Chairman in March 2015.

AAHK has initiated two major projects through ACI Asia-Pacific REC – the development of the first environmental survey of the region's airports, and the establishment of guidelines for aircraft cabin waste management.

The environmental survey results provide the basis for developing a database of ongoing environmental activities and policies in the region and thereby encourage participating airports to learn from one another.

The guidelines for cabin waste management have been developed in a collaboration between the ACI Asia-Pacific REC, ACI WESC, and with IATA, the airlines' industry body. This collaborative approach is necessary because resolving the coordination between the airlines, the airports, and their various contractors is the key issue. Before drafting the airport section of the guidelines, AAHK initiated a waste handling survey of airports and airlines to understand current practices and develop a standardised approach, which was a key requirement of the airlines.

In addition, AAHK hosted the 4<sup>th</sup> ACI Asia-Pacific REC meeting in September 2014, in which more than 20 representatives from regional airports participated and shared their views on topics including waste management, aircraft noise and carbon management. The then Cathay Pacific Airways Head of Environmental Affairs, Dr Mark Watson, also shared the airline's perspective on a range of environmental issues.

Apart from airport business partners, AAHK also engages with suppliers/contractors, regulators, passengers, local communities and environmental NGOs to reduce HKIA's environmental footprint.



#### **Case Study**

## **HKIA Environmental Management Recognition Scheme**

In 2014, AAHK organised the HKIA Environmental Management Recognition Scheme (the Scheme) to encourage airport tenants to embed environmental practices into their daily operation. The Scheme was first introduced in 2012. Waste management was selected as the theme this year to support the HKSAR Government's effort to address the territory-wide waste problem. Airport tenants were also assessed on other environmental aspects including energy efficiency, water efficiency, wastewater management, air pollution control, and noise pollution control.

At the award presentation ceremony held in March 2015, which was officiated by Wong Kam-sing, Secretary for the Environment, and Fred Lam, CEO of AAHK, 19 restaurants and 23 retail shops were recognised for their outstanding environmental performance. Catalina's Restaurant and The Magic of Hong Kong Disneyland won the Grand Award in the restaurant and retail categories respectively. The two winners had implemented a range of good environmental practices and demonstrated their commitment for future improvement by developing environmental management plans. AAHK is currently planning to extend the reach of the campaign to airport business partners.

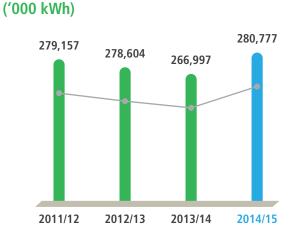


## Carbon and Energy Management

HKIA has pledged to reduce airport-wide carbon emissions by 25% per workload unit (WLU)<sup>9</sup> by 2015 based on 2008 levels. In 2014, a 22.4% reduction was achieved. As the existing carbon reduction target ends in 2015, AAHK has engaged a consultant to develop new five-year and 20-year targets and advise on the associated reduction strategies. The study is expected to be completed in 2015/16.

AAHK accounts for approximately 40% of the airport-

Electricity consumed by AAHK's facilities



#### HKIA's carbon management approach •

2008

AAHK conducted the first carbon audit of its own buildings and facilities at HKIA, following the release of the Government's guidelines on GHG reporting.

#### 2013 and 2014

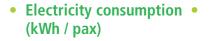
AAHK successfully renewed the accreditation, and extended the HKIA Carbon Reduction Programme to cover more airport business partners at HKIA. An airport-wide audit, in conjunction with airport business partners, was conducted. This laid the foundation for the airport-wide HKIA Carbon Reduction Programme.

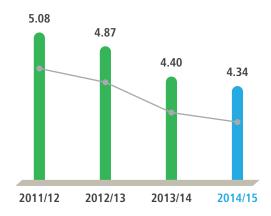
2009

#### 2012

HKIA was awarded the 'Optimisation' level in ACI's Airport Carbon Accreditation programme. The programme is the airport sector's global standard for carbon management.

wide carbon emissions. Electricity consumption is the major contributor. In 2014/15, AAHK's consumption increased by 5.2% compared to 2013/14. This was mainly due to the increased usage of fixed ground power (FGP) and pre-conditioned air (PCA) systems by aircraft at frontal stand since the APU ban came into effect in December 2014, and the operation of new airport facilities at the western apron and west vehicular tunnel. Nevertheless, electricity consumption per passenger dropped to 4.34 kWh, a reduction of 1.4% compared to 2013/14.





AAHK, together with about 40 airport business partners, pledged to reduce airport-wide carbon emissions by 25% per WLU by 2015 based on 2008 levels (i.e. the year in which AAHK conducted the first carbon audit).

2010

2011

AAHK developed a proprietary online carbon audit system that provides a carbon monitoring and reporting platform for AAHK and airport business partners.

<sup>9</sup> One WLU is equal to one passenger or 100 kg of cargo.

Energy saving measures in 2014/15

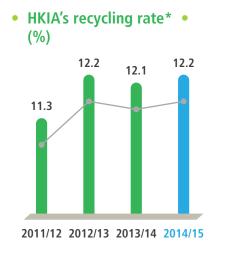
Completed the replacement of 100,000 LEDs in the terminal buildings in March 2015. The actual saving from the entire replacement project is 18.2 million kWh per year, equivalent to 11,500 tonnes of carbon emissions. This is 20% greater than the saving of 15 million kWh estimated at the start of the project.

Began installation of two high voltage chillers with high Coefficient of Performance (COP) values, which will be completed by July 2016. Higher COP values deliver higher energy efficiency. Upon completion of the project, about 9.8 million kWh will be saved each year, which is equivalent to about 6,200 tonnes of carbon emissions.

Started to replace existing motors for 570 air handling units and ventilation fans in Terminal 1 with high efficiency motors. The replacement project is expected to be completed in the first quarter of 2017, with an estimated saving of 2.6 million kWh per annum, equivalent to approximately 1,600 tonnes of carbon emissions.

## Waste Management

Waste is one of Hong Kong's most pressing environmental issues. AAHK focuses on reducing the absolute amount of waste generated and facilitating waste separation at source to promote recycling. AAHK has set a long-term target of recycling 50% of the waste generated at HKIA by 2021. In 2014/15, about 22,000 tonnes of waste were sent to landfill from HKIA and over 3,000 tonnes of recyclables were collected – a recycling rate of around 12.2%.





Recyclables collected
 (kg / pax)



\* HKIA's recycling rate covers the following recyclables: paper and cardboard, food waste (collected from AAHK's facilities), plastic, metal and cans, wooden pallets and boxes, glass, waste cooking oil, and chemical waste.

In April 2014, AAHK established a Waste Management Task Force, which is chaired by the EDCD and comprises the heads of key departments, to review existing waste management practices and identify possible solutions to reduce waste and promote recycling at HKIA. In April 2015, the task force commissioned a waste management study to assist AAHK in developing strategies and programmes to improve the ongoing waste monitoring and HKIA's overall waste performance. The study will be completed in 2015/16.

### Case Study

## Extension of Food Waste Recycling and Food Rescue Programme

#### Food Waste Recycling

AAHK has been collecting food waste for recycling since 2003. In 2011, the scope of collection was expanded to cover 17 airport business partners including hotels and airline caterers. Taking advantage of the spare capacity in the food waste collection trucks, AAHK ran a pilot programme in 2014 with Swire Properties and Link to collect food waste in nearby Tung Chung. The pilot programme was successfully completed and AAHK is exploring ways to extend food waste recycling to other organisations and facilities in Tung Chung. In 2014/15, a total of 1,150 tonnes of food waste was converted into fishmeal as a result of this initiative.

## **HKIA Food Rescue Programme**

AAHK started the HKIA Food Rescue Programme in partnership with a local NGO, Food Angel, in August 2013 to collect surplus food from restaurants and caterers at HKIA. Through the HKIA Environmental Fund, AAHK sponsored Food Angel to purchase a refrigerated truck to transport the surplus food and in October 2014, to set up a central storage room at HKIA to collect more surplus food from catering outlets. Four more tenants have joined the programme since the operation of the storage room, bringing the total to 10. In 2014/15, Food Angel collected 17.5 tonnes of surplus food and transformed it into over 20,000 hot meal boxes for distribution to the underprivileged.



## Air Quality

Air quality is a significant public concern in Hong Kong, particularly with respect to its associated impacts on health. While the key emitters of air pollutants at HKIA are aircraft in the landing and take-off (LTO) cycle and the general road traffic, which are outside of AAHK's direct control, we have established an air quality monitoring system since 2004 and conducted studies to better understand the operational air quality impact of HKIA since 2007. Where AAHK can control or influence the air emission sources, such as the vehicles operating on the airside, we have established standards and procedures to minimise emissions and better manage the air quality.

#### Air quality monitoring

AAHK adopts a two-pronged approach to air quality monitoring: the development of an inventory of significant emissions sources and the ongoing monitoring of background air quality. Ambient air quality at HKIA is monitored through two onairport air quality monitoring stations and a control site on Sha Chau. The air pollutants monitored include nitrogen dioxide (NO<sub>2</sub>), sulphur dioxide (SO<sub>2</sub>), respirable suspended particulates ( $PM_{10}$ ), fine suspended particulates ( $PM_{2.5}$ ) and ozone (O<sub>3</sub>). The hourly average concentrations are collected and disclosed in real-time to the public on our **website** ( $\square$  page 97).

The amount of air emissions from civil aviation in Hong Kong is compiled by the Environmental Protection Department (EPD) of HKSAR Government on an annual basis. Please refer to the annual **Hong Kong Air Pollutant Emission Inventory** (IZ page 97) for details.



#### Air quality management

AAHK's approach to air quality management is to reduce air emissions that are under AAHK's direct control (i.e., emissions related to AAHK vehicles), and to facilitate emissions reduction which AAHK can guide or influence. The latter includes airside vehicles operated by airport business partners and aircraft on the ground.

#### AAHK's own vehicle fleet

AAHK continues its switch to cleaner vehicles. The number of EV saloons owned by AAHK increased from 37 in 2013 to 43 in June 2015. AAHK also owns 10 single-cab and 20 dual-cab apron passenger buses as well as four airside staff shuttle buses that meet the EURO V emission standard.

#### Airside vehicles

All vehicles driven within the Airport Restricted Area (ARA) are required to obtain an Airside Vehicle License (AVL) issued by AAHK. AAHK has stipulated specifications on emission standards in the requirements of AVL, with which all airside vehicles must comply. Furthermore, since July 2013, AAHK has required all newly registered saloons operating in the ARA to be EVs. By July 2017, all saloons on the airside must be EVs.

## **Stakeholder Perspectives**

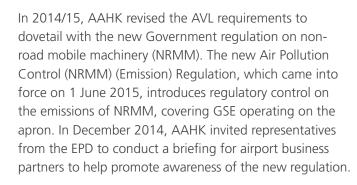
Alexander Romar, General Manager Hong Kong, KLM Equipment Services:

Jardine Air Terminal Services supports AAHK's plan to gradually replace airside vehicles and GSE with electric alternatives where commercially and operationally viable. Over the last five years, we have shown that the transition to using more than 50 units of EGSE, including 10 solar-powered passenger stairs and five fully electric lower deck loaders, for ramp and aircraft handling has a lower total cost of ownership than our previous diesel-based fleet.

#### Aircraft APU emissions

Aircraft on the ground normally use their APUs, which are small engines located at the rear of aircraft, to provide electrical power when the main engines are switched off. To reduce emissions from burning jet fuel, AAHK implemented an APU ban in December 2014 that controls the usage of APUs at frontal stands. In order to meet aircraft needs for electrical power and cabin cooling once the ban came into effect, AAHK upgraded all FGP and PCA systems – a total of 136 FGP units and 96 PCA units.

AAHK also worked closely with airport business partners to organise trials and developed an operational procedure for the ban. AAHK conducts regular monitoring to ensure compliance by the operators.



To facilitate the transition to EVs and EGSE operating at HKIA, AAHK completed the installation

of 158 EV chargers and 56 EGSE chargers in 2014. AAHK will continue to increase the number of EV and EGSE chargers in new development projects such as the Midfield Development.

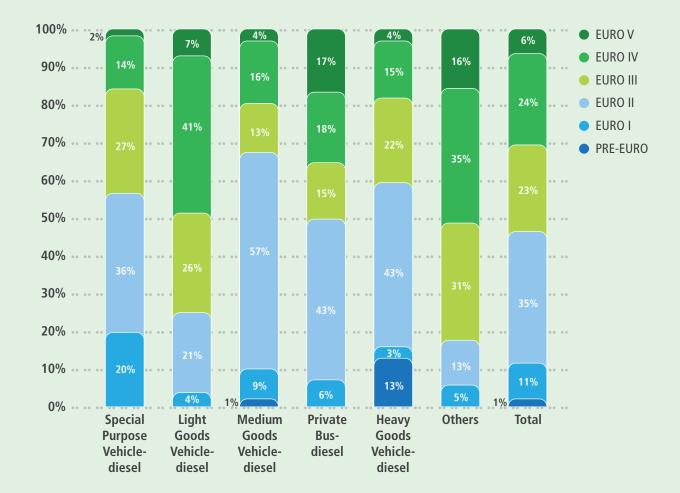
#### **Case Study**

## Air Quality Study with The Hong Kong University of Science and Technology (HKUST)

Since 2007, AAHK has worked with Professor Alexis Lau, Dr Li Ying and other experts at HKUST to analyse the air quality data and study the operational air quality impact of HKIA. The following two studies were conducted by HKUST in 2014/15.

## Airside Vehicle Emissions Inventory

In 2014, HKUST completed a baseline inventory of air emissions associated with the operation of HKIA for the year 2011. The study focused on emissions from airside vehicles and GSE. The findings helped to identify the best opportunities for reduction of emissions that will come from accelerating the retirement of aged diesel vehicles, and replacing them with EVs and other low emission vehicles.



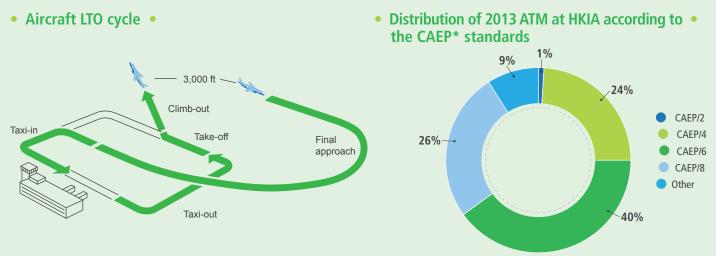
#### • Breakdown of NO<sub>X</sub> emissions from airside vehicles and GSE by emission standards •

The study revealed that old diesel-powered vehicles and GSE are the principal sources of nitrogen oxides (NO<sub>x</sub>) and fine suspended particulates ( $PM_{2.5}$ ) in the airside fleet. The pre-Euro IV diesel fleet, the majority of which are over 10 years of age, accounts for around 70% of the NO<sub>x</sub> and PM<sub>2.5</sub> emissions of the entire fleet.



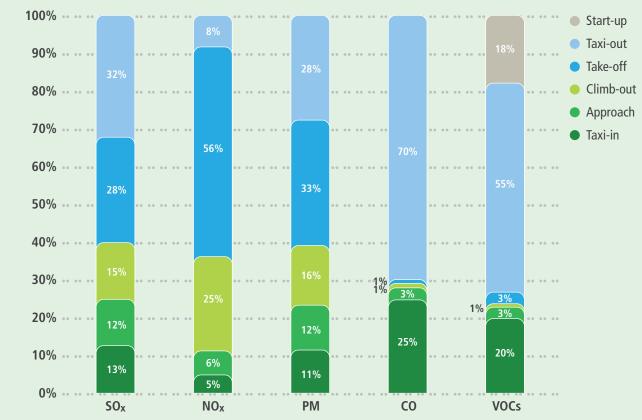
## **Aircraft-related Emissions Inventory**

In 2014, HKUST began a study on emissions associated with the aircraft LTO cycle below 3,000 feet. This included analyses of the emissions from different phases of the LTO cycle and the mix of CAEP\* aircraft engine emission standards. The study findings have provided grounds for further investigation of potential emission-reduction control measures for aircraft on the ground, such as reduced-engine taxiing. The results are shown in the chart below.



Source: Aviation and the Global Atmosphere, IPCC (1999)

\* The CAEP standards refer to the aircraft engine emission standards set by ICAO's Committee on Aviation Environmental Protection. The higher the CAEP number, the better the aircraft emission performance.



#### • Aircraft emissions during different phases of the LTO cycle •

The findings underline the opportunities for reducing aircraft emissions during taxi-in and taxi-out where reduced-engine taxiing or new technologies such as TaxiBot or electric aircraft tractors may be applied.

In 2015/16, HKUST will conduct another study on air emissions from the landside and marine transportation from HKIA.

## **Biodiversity**

AAHK recognises the importance that biodiversity and functional ecosystems play in sustaining a high quality of life for the people of Hong Kong. We have a demonstrable duty of care to avoid and minimise adverse impacts on biodiversity during the development and operation of HKIA. Where impacts cannot be avoided, we work closely with regulators and relevant stakeholders to provide appropriate mitigation and compensation.

In 2015/16, AAHK will establish a Biodiversity Strategy that sets out objectives and a framework for conserving biodiversity at HKIA and identifies key priorities for action. It will be used to guide the preparation of a conservation action plan to avoid and minimise impact, and where possible, enhance the sustainability of at risk species and habitats.

The most important among these are: i) terrestrial species, such as the endemic Romer's Tree Frog (RTF), which lives on Chek Lap Kok; ii) marine species that live in the waters surrounding HKIA, such as the CWD; and iii) species such as sharks and reef fish that are sourced outside Hong Kong, but are either consumed in or traded through the city in globally significant volumes.



The 3RS EIA included a very thorough assessment of issues related to CWDs and proposed a multi-pronged approach to ensure that the identified potential impacts on CWDs are avoided, minimised and mitigated to an acceptable level during construction and operation phases. Mitigation measures include the use of non-dredge methods for reclamation, the establishment of a new marine park, managing the SkyPier high-speed ferries by limiting the traffic, diverting the ferry routes and restricting the speed of ferries. Some of these measures will be implemented prior to the 3RS construction works to protect the CWDs and other marine life.

RTFs are not expected to be significantly affected by the 3RS. In 2014/15, a study on the status and population of RTFs concluded that a viable population was still in place. Conservation measures to protect and improve the quality of the species' key habitat have been developed.

Seafood is an important and popular component of Cantonese cuisine, and Hong Kong is the global centre of the largely unsustainable trade in live reef fish. Through the HKIA Environmental Fund, AAHK has provided funding for ADM Capital Foundation to study and share ways to improve the sustainability of the trade.

> In order to reduce the impact of its own consumption, AAHK updated its Sustainable Seafood Pre-order Dining Policy in May 2014. Following a review of best practices as advised by the Environment Bureau and as adopted by other organisations, AAHK has widened the scope of its renamed Sustainable Dining Policy to include black moss, snake, turtle and Tiger Grouper in the list of food items to be avoided.

## Noise Management

While noise pollution is the principal environmental issue for many airports, the remote location of HKIA and the fact that most of the flight paths are over the sea ensures that relatively few people are adversely affected by aircraft noise in Hong Kong.

Hong Kong has adopted the Noise Exposure Forecast (NEF) 25 contour for managing aircraft noise impact. This is in line with or, in some cases, even more stringent than the standards adopted by developed countries. Currently, less than 1,000 people reside within the NEF 25 noise contour.

For villages on Lantau covered by the prevailing NEF 25 contour, AAHK has made a commitment to offer the provision of indirect noise mitigation measures (the installation of air conditioners and noise insulating windows) at our cost. We will also offer financial assistance via the Village Home Improvement Subsidy scheme. In addition, AAHK is exploring the feasibility of introducing environmental charges and an incentive scheme to encourage airlines to deploy quieter aircraft.

CAD conducts regular noise measurements in several districts close to the flight paths and monitors the implementation of aircraft noise mitigation measures developed by the Government. More information can be found on the CAD website (P page 97). CAD also monitors and handles public complaints related to aircraft noise.

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# PEOPLE AND COMMUNITY

HKIA's success is driven by the dedication and hard work of AAHK's 1,500 staff and over 65,000 people who comprise the airport community. Attracting, developing and retaining talent across HKIA is necessary to meet evolving business needs and support the airport's long-term development.

> AAHK has refined its human resources strategy to build an appropriately skilled, experienced and motivated team to meet future challenges. We have also established a new community investment vision that aims to contribute to the social and economic growth of neighbouring communities while addressing the labour shortage at HKIA.

香港 HONG KONG INTERNATIONAL AIRPORT

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## **KEY ACHIEVEMENTS IN 2014/15**



Conducted a **remuneration review** to maintain market competitiveness in attracting and retaining talent



Revamped the **corporate goals structure** to drive performance and desired behaviour to support AAHK's development



Conducted an organisational review to support the sustainable growth of AAHK



Enhanced **staff transportation** by introducing new bus routes and extending the frequency and operating hours of popular routes

## **OBJECTIVES AND TARGETS**



Build shared **"vision, mission and values"** to enhance organisation capabilities



Enhance AAHK's manpower planning and resourcing strategy to support airport expansion



Develop a community investment strategy

A STAFF CLUB **高融**冒

## A Refining our Human Resources Strategy

#### - Florence Chung,

Executive Director, Human Resources and Administration, AAHK

#### **Q** What has been your focus since joining AAHK in October 2014?

A My focus has been on refining the human resources strategy and driving its successful implementation to ensure that we have a committed and competent workforce to achieve AAHK's long-term vision. The refined strategy includes initiatives to enhance organisation effectiveness, build talent pool and strengthen employee engagement, contributing to the continuous enhancement of AAHK's employer brand to attract and retain talent to support the airport's sustainable growth.

## **Q** What are the key initiatives that AAHK has implemented under its refined human resources strategy?

A remuneration review covering pay structure and benefits based on a market analysis was commissioned in early 2015. We adopted a revised pay structure which is competitive amongst leading Hong Kong and multinational companies, giving AAHK greater flexibility in making attractive offers for talent acquisition and retention. To drive performance and desired behaviour to support AAHK's development, the corporate goals structure and performance measures for the variable compensation scheme has been revamped. The corporate goals structure adopts a balanced scorecard framework to address stakeholder interests in its entirety. Furthermore, changes to the organisation structure were made to support the upcoming 3RS project, ongoing capital works and other key initiatives.

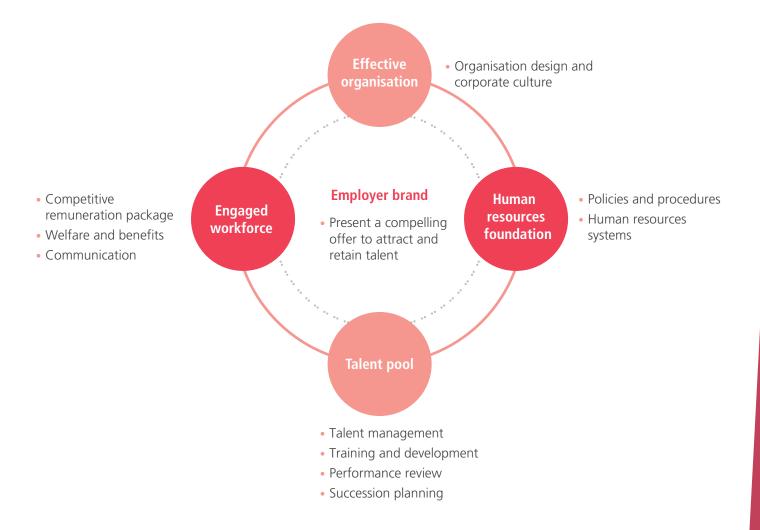
## **Q** How is AAHK going to ensure that it will have enough of the right staff to support the growth and operation of an expanded airport?

We need to plan ahead for this. We will first conduct a manpower forecast to better understand our long-term manpower needs. We will then devise a comprehensive manpower plan and formulate the necessary recruitment strategies.

Given AAHK's uniqueness in running the only airport business in Hong Kong, it is our role to build the airport management capabilities of our core team. We will continue to enhance our people development framework, update the leadership competency model and refine the training curriculum to ensure that our people are equipped with the necessary expertise and experience to support the growth of the airport. We will also revisit AAHK's "vision, mission and values" to reinforce a shared vision across all levels in the organisation and develop AAHK's employee value proposition to strengthen talent attraction and retention.

## Human Resources Strategic Focus

To ensure AAHK's sustainable growth, it is imperative to adopt a strategic approach to human resources management so as to attract and retain talent at all levels to meet evolving business needs and support long-term development. Under the direction of the Executive Director, Human Resources and Administration, a newly-created position in 2014/15, a thorough review of AAHK's human resources practices was undertaken. A refined strategy has emerged with a plan to strengthen AAHK's performance-driven culture, revamp the talent management process, enhance incentive mechanisms and explore how AAHK can better support its people.



### **Remuneration Review**

In early 2015, AAHK commissioned a remuneration review that analysed pay structure and benefits against the market. To attract and retain top talent, we adopted a revised pay structure which is competitive amongst leading Hong Kong and multinational companies, enabling AAHK a higher flexibility in negotiating attractive offers and retaining high performers. To ensure the comprehensiveness of the remuneration review, a study on the benefits level against the market was also conducted. Based on the findings, AAHK will enhance some of the benefits to bring them in line with the market and further explore family-friendly measures to strengthen AAHK's brand as a caring employer.



## People Development and Succession Planning

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Under AAHK's People Development and Succession Planning Framework, there are various programmes and schemes to identify and develop staff at various levels to support the growth of AAHK. An integrated approach to building our pool of talent and future leaders is planned for 2015/16:

- Revisit AAHK's "vision, mission and values" and develop our employee value proposition, then formulate a culture promotion strategy to instil a preferred AAHK culture
- Revamp AAHK's Leadership Competency Model (which will be applied in the review of AAHK's learning curriculum, performance management system and assessment centre for high potential talent development)
- Revamp AAHK's Management Trainee Programme
- Commence a study on establishing an AA Academy which will nurture high-quality operational, professional and managerial staff in-house to support business expansion
- Enhance the in-house e-learning platform

## Equal Opportunity and Diversity

AAHK supports the vision of the Equal Opportunities Commission and observes the Commission's advice and codes of practice. AAHK has established human resources policies and processes to ensure that the work environment is free from discrimination against any person on grounds of gender, age, marital status, religion, race, nationality or disability. In particular, AAHK focuses on ensuring fair and inclusive recruitment, training and development, and promotion of staff.

## **Ethics and Integrity**

AAHK requires all employees to uphold the highest levels of ethics and integrity in conducting the affairs of the Authority and in performing their duties. All staff members are required to comply with the policies and procedures on prevention of bribery, solicitation and acceptance of advantages, and on avoidance of conflicts of interest as stipulated in AAHK's Code of Conduct.

A Whistle Blowing Policy and Grievance Handling Policy are in place to encourage employees to report any impropriety through appropriate channels and to ensure that the grievances or complaints are handled in a timely and fair manner. Ethical compliance is further strengthened by the presence of a high-level Ethics Panel which is convened as needed to review serious ethical issues. The Ethics Panel may take independent advice and reports to the CEO and/or the Audit Committee & Finance Committee, as appropriate. AAHK's Code of Conduct forms part of the contract of employment between AAHK and its employees. It is reviewed and updated regularly, and is available on AAHK's intranet. All employees are required to complete a Code of Conduct refresher course and a short test via the in-house e-learning platform on an annual basis.

Since 2013, AAHK has run a six-month employee training programme, "Corporate Governance in AAHK", to reinforce the corporate governance culture and employees' mindset on compliance. The programme covers three main aspects: i) General Conduct & Mindset; ii) Corporate Policies, Procedures & Practice; and iii) Legal Compliance. All new employees are required to complete this training programme within six months of joining AAHK. In 2014/15, all new employees also completed anti-corruption training.



## Health and Safety, and Staff Well-being

AAHK is committed to providing a safe and healthy workplace for staff. The physical environment, including workstations and furniture, is designed and procured with ergonomics in mind, whilst periodic training promotes a robust safety culture amongst our employees. Employee benefits including medical and life insurance, discounted voluntary health screening, work injury compensation, parental leave, retirement provision and a 24-hour Employee Assistance Scheme are available to both permanent and fixed term contract employees.

The AA Staff Club, sponsored by AAHK, promotes greater team spirit and sense of belonging across the organisation and enhances staff well-being through recreational, social, sports, family and volunteering activities. The Staff Club Committee comprises 14 representatives from different departments. There are currently 11 interest groups under the Staff Club: basketball, badminton, football, tai chi, tai chi fan, tennis, bowling, running, music, Christian fellowship and the social service group. During 2014/15, the AA Staff Club again organised the popular airport family visit which gives family members of AAHK staff a unique opportunity to learn first-hand about the daily airport operation and the challenges of the work environment. The annual "Family Fun Day" event saw around 1,000 AAHK staff and their families enjoy a visit to Ocean Park Hong Kong.



### **Stakeholder Perspectives**

**Rebecca Ho**, Chair of AA Staff Club:

Since I took up the role of Chair of AA Staff Club in January 2015, one of the most memorable events has been the "Canstruction® Hong Kong 2015" competition, in which 50 AAHK staff built a 2.4-metre tall structure of Tian Tan Buddha, a popular tourist attraction on Lantau, using over 10,000 cans of food. The canned food was later donated to local food banks. AAHK not only won the Best Design Award, earning us a place to compete in the International Canstruction Awards, but also claimed the Jurors' Favourite Award. Going forward, AA Staff Club will take a new direction and focus on staff bonding. There will be more fun-filled leisure events as well as sports-oriented and environmental-friendly activities for everyone to enjoy in abundance throughout the year."

## Airport-wide Labour Challenges

Hong Kong's labour market is close to full employment but has a shortage of skilled workers for technical and manual jobs. This has also become a critical challenge for HKIA where there are more than 6,500 unfilled jobs across the airport community.

Although AAHK staff represents a relatively small part of the 65,000-strong workforce at HKIA, we recognise our role in working with our business partners and contractors to address common labour concerns and to ensure the smooth operation of the airport. AAHK meets regularly with the human resources managers of major employers at HKIA to discuss issues of common interest, e.g. staff transportation and recruitment, and employment opportunities for the underprivileged.

In 2014/15, AAHK co-organised a number of job fairs, including the HKIA Job Expo 2014. AAHK continued to organise visits to HKIA, university career talks and work experience opportunities for students to promote careers in the aviation industry and to attract new recruits. Working through the Airport Transportation Liaison Group (formed by AAHK and comprising representatives of the Government's Transport Department, airport business partners and public transport operators),

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over 80 bus trips were added and fare concessions were made. AAHK has also responded to requests for workplace improvements on the apron, e.g. by improving staff amenities such as lightning protection shelters, seating areas and drinking facilities. AAHK continued to institute a hire-back practice which requires incoming service contractors to retain a certain percentage of operation staff from the outgoing service providers. This practice enhances job stability for frontline workers and benefits the service contractors and AAHK by retaining experienced staff who are familiar with the unique service requirements of the airport.

In 2015/16, AAHK will start to develop a Manpower Plan 2024 for AAHK to take into account the employment needs of the 3RS. This will be followed with the development of an associated recruitment plan. AAHK will also conduct the HKIA Workforce Survey annually. To further improve staff welfare, AAHK has coordinated with the Transport Department and franchised bus operators to operate four overnight express routes directly connecting HKIA with Yuen Long, Tuen Mun, Mongkok and Tseung Kwan O starting July 2015. Based on the passenger feedback collected, AAHK will make adjustments and/or introduce further enhancement as and when necessary. AAHK will continue to explore the introduction of new bus routes and extension of operating hours for popular routes to and from HKIA.

#### Case Study

## Hong Kong International Airport Recreation and Community Engagement (HKIARaCE)

In May 2014, AAHK launched the HKIARaCE initiative, a major new initiative to help HKIA retain staff and attract new recruits. Special events open to all HKIA staff are organised throughout the year to strengthen relationships between staff, enhance work-life balance and build a sense of pride within the airport community. AAHK has committed to organising two large-scale events and many other small-scale events on an annual basis.

In 2014/15, the two large-scale events were the "Star from the Airport" singing contest, the final round of which was staged at Terminal 2, and a full-day excursion on Lantau Island with stargazing in the evening. As the singing contest was very popular and received much support from across the airport community, we decided to broaden its scope to a "Talents from the Airport 2015" competition to feature different talent of airport staff, including dancing, singing and acting. Other smaller-scale events included interest classes, sports activities and luncheon talks on various topics. To date, more than 1,000 staff have registered as HKIARaCE members.

### **Community Investment**

In the past, AAHK has supported various community causes through corporate donations and employee volunteering. The HKIA Charity Fund provides funding to help the disadvantaged in Hong Kong and support disaster relief in the Mainland. The HKIA Environmental Fund sponsors environmental protection and sustainable living initiatives in Hong Kong. The social service group of the AA Staff Club organises volunteering activities for staff members and their friends and families to serve those in need.

In 2014/15, AAHK began to review its approach to community investment in order to strengthen its strategic focus. It was decided that a corporate-wide vision and strategy focusing on people development should be established.

AAHK's community investment vision is "to contribute to the social and economic growth of Hong Kong, in particular Lantau and other neighbouring communities, by nurturing talent, realising the potential of individuals, and encouraging participation in aviation-related industries".

Hong Kong International Airpor reation and Community Engage

The community investment vision is aligned with AAHK's overall vision statement and is intended to drive AAHKled airport-wide community investment activities through multi-stakeholder collaborations with NGOs, business partners, AAHK staff and nearby communities. AAHK is currently developing a strategy and a signature project to support this vision.

#### Contributing to neighbouring communities

In 2014/15, 433 AAHK staff and guest participants volunteered in 13 different community events, contributing a total of 2,393 volunteer hours. The activities included community services targeting the elderly and families in need in HKIA's neighbouring communities, green activities such as tree planting and beach cleaning, and other charity and fundraising events.

In January 2015, AAHK organised its second annual gift donation campaign. Apart from placing gift collection points at HKIA, AAHK also collaborated with Link for the first time to set up 10 collection points at Link's shopping

centres in six districts in Hong Kong. Over 60,000 gifts, including chocolates, toys, tablets and music instruments, were collected and sent to The Salvation Army for distribution to underprivileged children and families as Chinese New Year gifts.

## Supporting local technology and innovation

In February 2015, AAHK established the HKIA Technovation Board to drive systematic innovation and technology development at HKIA. The Board is supported by three initiatives: a new Airport Technology Advisory Council with external members from universities and technology institutions; the existing Future Airport Taskforce to engage the

airport community and test and make process changes; and a new HKIA Innovation Centre to provide a platform for testing prototypes and technologies that are applicable to HKIA, and for executing proof of concept projects.



In March 2015, the HKIA Innovation Centre collaborated with the Hong Kong Science and Technology Parks Corporation (HKSTP) to launch the "Technologies from Science Parks at HKIA" Programme. Through the Programme, HKSTP incubatees and start-up graduates have the opportunity to introduce their technological solutions and submit innovative collaboration project proposals that will help address AAHK's business needs and the technical challenges it will face in the future. Around 50 HKSTP companies have made presentations and demonstrations since the launch of the Programme. Further details of collaboration projects will be established in 2015/16.

## **Stakeholder Perspectives**

Allen Ma, CEO, Hong Kong Science and Technology Parks Corporation:

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We are excited about AAHK's new initiative – HKIA Innovation Centre under the HKIA Technovation Board – to leverage the airport as a platform to test prototypes and innovative use of technologies by Hong Kong entrepreneurs. This will not only make HKIA a smart airport but create business opportunities for local start-ups and promote the growth of the local technology industry.

#### Showcasing local arts and culture

In March 2015, AAHK formed a new Arts and Culture Advisory Committee to transform HKIA into a platform for promoting Hong Kong's arts and culture while creating a unique and memorable experience for passengers and visitors. Chaired by AAHK Board member Anita Fung, the committee comprises experts from the art, design, education, architecture and government sectors.

The Committee will implement a range of programmes such as temporary art exhibits, demonstrations, cultural booths, passenger engagement activities, performances and entertainments. The art and culture works can be on any theme, ranging from masterpieces of renowned artists to contemporary works of up-and-coming young talent. The first programme "Hong Kong Classics: Art, Culture and Music" was launched in July 2015.

#### • Highlights in 2014/15 •

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### **Green giving**

"Eat Green Give Green – Care for the Tung Chung Community" campaign: in partnership with Green Monday, AAHK sponsored a green gift – a healthy selection of fruits and vegetables – for people in need in Tung Chung for every vegetarian meal consumed at HKIA. 30 volunteers from AAHK and business partners distributed 200 green gift packs together with handmade veggie dumplings during the Tuen Ng Festival.

### Let's volunteer!

A total of 61 AAHK staff and their guests participated in a beach cleanup in Shui Hau Wan on Lantau Island as part of the International Coastal Cleanup 2014 Hong Kong. They collected 26 bags of trash and debris weighing a total of 270 kilograms.

## Showcasing talent

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In order to nurture young performers and showcase Hong Kong's homegrown talent to international travellers, AAHK provided a stage in the Arrivals Hall at HKIA for students from the Hong Kong Academy of Performing Arts to perform during festive celebrations.

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## **OBJECTIVES AND** TARGETS

AAHK's business planning encompasses a series of plans to address HKIA's short- to long-term needs. These plans include a 20-year HKIA Master Plan which is reviewed and updated every five years, a rolling Five-year Business Plan, and a Three-year Work Plan with a corresponding Annual Plan on execution. At the beginning of each year, AAHK formulates its annual corporate goals and performance measures to align with the business planning process. Based on the 2015-2020 Business Plan and the corporate goals set for 2015/16, the table below provides a summary of the key objectives and targets set for various sustainability-related issues.

Area	Objective	Progress to date	Target set	Target date
HKIA's long-term development	Adopt a forward looking approach in addressing the airport's long-term needs through a 20-year master planning process	Development of the fourth 20-year Master Plan (MP 2035) began in 2014	Complete the MP 2035	By the end of 2017
	Revise the corporate goals structure by setting people and community investment as key priority areas	New structure established in 2014	Implement the new corporate goals structure and performance measures	In 2015/16
Capacity issues	Plan and implement capacity enhancement and efficiency improvement initiatives in view of air traffic growth	West Apron expansion project completed in July 2015, providing 31 additional parking stands	Complete the MFC, which will provide 20 new parking stands and serve 10 million more passengers each year	By the end of 2015
		Midfield Development project is underway	Complete Terminal 1 Annex Building and expansion of existing facilities	In 2019/20
	Plan for HKIA's long-term expansion	Environmental Permit for the 3RS project granted in November 2014	Commence reclamation works for the 3RS project	In 2016/17*
		The Executive Council affirmed the need for the 3RS in March 2015		
Airport safety	Improve the safety of airport operations by further reducing passenger and staff injury rates	Airport Composite Safety Index of 4.85 achieved in 2014/15, a 9% improvement from last year	Achieve an Airport Composite Safety Index not exceeding 4.70	In 2015/16
Customer service	Further enhance passenger experience and satisfaction with services and facilities at HKIA	Achieved an overall satisfaction score of 4.85 in ACI's ASQ Survey 2014	Maintain an overall satisfaction score of at least 4.85	ln 2015

\* Subject to the Executive Council's authorisation of the proposals under the Foreshore and Sea-bed (Reclamations) Ordinance and the Town Planning Ordinance.

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Environment	Realise the World's Greenest Airport pledge	Completed the Green Airport Benchmarking Study Incorporated recommendations from the study in AAHK's Five- year Environmental Plan	Conduct a follow-up benchmarking study to assess AAHK's progress towards meeting the World's Greenest Airport pledge	In 2017
			Develop the HKIA biodiversity strategy	In 2015/16
			Upgrade AAHK's existing Environmental Management System in line with ISO 14001:2015 and consider certification	By 2017
	Reduce HKIA's carbon	Achieved a 22.4% reduction in	Achieve a total reduction of 25%	In 2015
	intensity by 25% by the year 2015 from the 2008 baseline	carbon intensity in 2014	Establish short-term (five-year) and long-term (20-year) carbon reduction targets	In 2015/16
	Promote recycling and waste separation at source at HKIA	Established the Waste Management Task Force in April 2014 to develop a waste	Complete a comprehensive waste management study for HKIA	In 2015/16
		management strategy	Recycle 50% of all waste generated at HKIA	By 2021
People development	Develop an effective human resources strategy to support	Conducted a thorough review of AAHK's human resources	Revisit AAHK's "vision, mission and values"	2015/16 onwards
	the future growth of AAHK	practices in 2014/15 Conducted a remuneration review and adopted a revised	Formulate a culture promotion strategy to instil a preferred AAHK culture	
		pay structure starting 2015/16	Enhance AAHK's people development and succession planning framework	
			Revamp the Management Trainee Programme	
Corporate sustainability	Develop AAHK's sustainability management and reporting to support	Conducted a benchmarking study to support the development of AAHK's	Further develop AAHK's stakeholder engagement on sustainability	2015/16 onwards
	AAHK's sustainability vision and meet stakeholders' expectations	sustainability framework Prepared Sustainability Report 2014/15 'in accordance' with the GRI G4 Guidelines: the Core option	Prepare to report 'in accordance' with the GRI G4 Guidelines: the Comprehensive option	In 2016/17
Community investment	Develop AAHK's community investment	Developed a corporate-wide community investment vision	Further develop AAHK's community investment strategy and signature project	2015/16 onwards

## PERFORMANCE INDICATORS

	Unit	2014/15	2013/14	2012/13	2011/12
Economic Performance <sup>10</sup>					
Economic value generated					
- Revenue	HK\$ million	16,367	14,810	13,134	12,154
Economic value distribution					
- Operating costs	HK\$ million	5,053	4,872	4,282	3,928
- Employee wages and benefits <sup>§</sup>	HK\$ million	1,786	1,669	1,438	1,287
- Payments to providers of funds <sup>11</sup>	HK\$ million	5,434	4,613	4,164	3,372
- Payments to government <sup>12</sup>	HK\$ million	1,099	785	1,156	1,259
- Financial donations	HK\$ million	2	3	2	1
Economic value retained*	HK\$ million	4,779	4,537	3,530	3,594
Operational Performance					
Passenger traffic <sup>13</sup>	Millions of passengers	64.7	60.7	57.2	54.9
Cargo throughput <sup>14</sup>	Millions of tonnes	4.4	4.2	4.0	3.9
Aircraft movements <sup>15</sup>	Thousands	396	377	355	339
Airlines operating at HKIA	Number	105	106	107	101
Scheduled destinations served from HKIA <sup>16</sup>	Number	180	179	176	160

<sup>16</sup> The breakdown of destinations by frequency and airline customers is not reported as the data is considered commercially sensitive.

<sup>§</sup> In 2014/15, AAHK began to disclose total staff costs and related expenses, which included staff costs capitalised into assets under construction in its Annual Report. As a result, the 2011/12, 2012/13 and 2013/14 figures have been restated to facilitate comparison with the 2014/15 figure.

\* 'Economic value retained' is derived by subtracting 'Operating costs', 'Payments to providers of funds', 'Payments to government' and 'Financial donations' from 'Economic value generated'. 'Operating costs' includes 'Employee wages and benefits'. The 2011/12, 2012/13 and 2013/14 figures have been restated to reflect this computation.

<sup>&</sup>lt;sup>10</sup> Economic performance data was extracted from AAHK's audited consolidated financial statements.

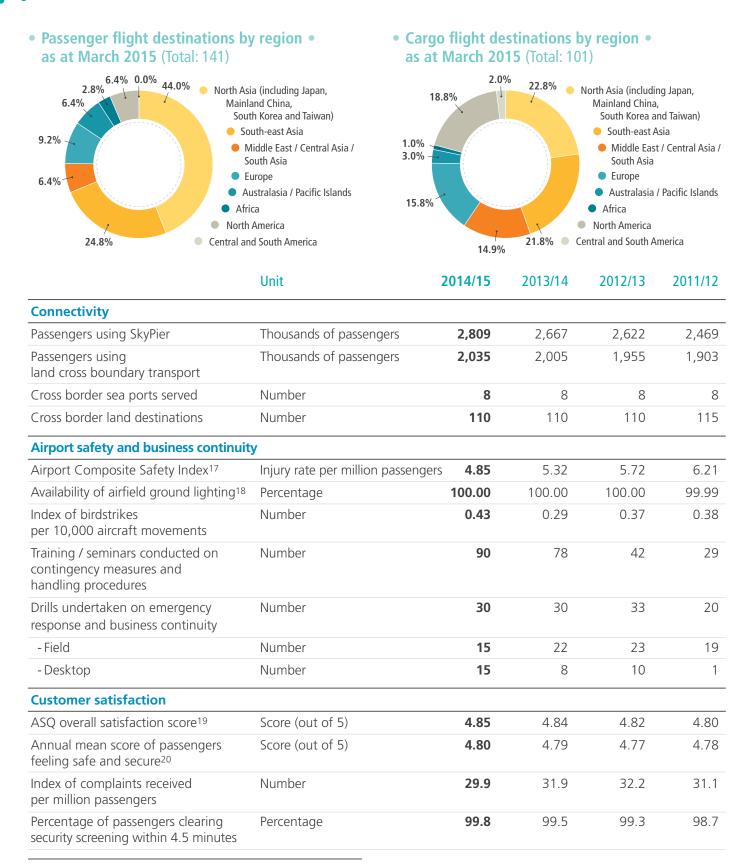
<sup>&</sup>lt;sup>11</sup> Includes dividend paid to the HKSAR Government, AAHK's sole shareholder (2014/15: HK\$5,300 million, 2013/14: HK\$4,400 million, 2012/13: HK\$3,900 million, 2011/12: HK\$3,100 million).

<sup>&</sup>lt;sup>12</sup> Hong Kong Profits Tax paid to the HKSAR Government.

<sup>&</sup>lt;sup>13</sup> Total number of passengers includes originating, terminating, transfer and transit passengers. Transfer and transit passengers are counted twice. The number of passengers broken down by passengers on international and domestic flights is not relevant for AAHK as all passengers are classified as international. Origin-and-destination and transfer and transit data is not reported as it is considered commercially sensitive.

<sup>&</sup>lt;sup>14</sup> Cargo tonnage includes import, export and transhipment (counted twice) cargo. Air mail is excluded. Cargo tonnage broken down by cargo transported on all-cargo flights and on passenger flights is not reported as the data is considered commercially sensitive.

<sup>&</sup>lt;sup>15</sup> Aircraft movements include civil international passenger, cargo and non-revenue flights. Military and local flights are excluded. Aircraft movements by day and by night, broken down by commercial passenger, commercial cargo, general aviation and state aviation is not reported as the data is considered commercially sensitive.



<sup>17</sup> Airport Composite Safety Index is a safety performance indicator that measures the number of injuries arising from passengers and staff, with respect to the number of passengers.

<sup>18</sup> The availability of airfield ground lighting is determined in accordance with the requirements of ICAO's Annex 14 to the Convention on International Civil Aviation. The percentage of availability = [(Total operation hour – System down time) / Total operation hour] x 100%. The percentages are rounded to two decimal points for reporting purposes. However, in 2013/14 and 2014/15, there were incidents which resulted in system down time and the overall availability was not precisely 100%.

<sup>19</sup> According to ACI's ASQ Survey, which is based on performance in a calendar year (i.e. 1 January to 31 December).

<sup>20</sup> This is an aspect covered in ACI's ASQ Survey.

	Unit	2014/15	2013/14	2012/13	2011/12
Environmental Performance					
Material use					
Paper	Tonnes	46	43	45	45
Energy consumed by type					
Diesel	Litres	1,087,730	841,982	822,722	760,659
Petrol	Litres	107,837	122,186	144,504	160,492
LPG	Litres	15,923	9,476	5,019	23,808
B100 Biodiesel <sup>21†</sup>	Litres	8,711	13,034	-	-
Total fuel consumption <sup>22</sup>	GJ	43,131	36,892	36,363	35,036
Electricity	kWh ('000)	280,777	266,997	278,604	279,157
Total electricity consumption <sup>22</sup>	GJ	1,010,797	961,189	1,002,974	1,004,965
Electricity consumption per passenger	kWh per passenger	4.34	4.40	4.87	5.08
Greenhouse gas (GHG) emissions <sup>23</sup>	Unit	2014	2013	2012	2011
Scope 1 – Direct emissions					
- Stationary combustion	Tonnes ('000) of CO <sub>2</sub> e	0.1	0.07	0.13	0.23
- Mobile combustion	Tonnes ('000) of CO <sub>2</sub> e	2.79	2.5	2.44	2.25
- Fugitive emissions	Tonnes ('000) of CO <sub>2</sub> e	5.84	5.75	10.71	9.54
Scope 2 — Indirect emissions					
- Electricity <sup>24</sup>	Tonnes ('000) of CO <sub>2</sub> e	178.43	169.64	161.45	163.96
Scope 3 – Other indirect emissions <sup>25</sup>					
- Other indirect emissions	Tonnes ('000) of CO <sub>2</sub> e	0.53	0.60	0.44	0.38
Emissions avoided					
- By tree planting and paper recycling	Tonnes ('000) of CO <sub>2</sub> e	0.35	0.37	0.34	0.32
GHG net emissions					
- Absolute	Tonnes ('000) of CO <sub>2</sub> e	187.34	178.19	174.83	176.04
- Intensity-based	kg CO <sub>2</sub> e/WLU <sup>26</sup>	1.75	1.76	1.81	1.89

<sup>&</sup>lt;sup>21</sup> AAHK uses B5 biodiesel in its vehicles which is 5% B100 biodiesel mixed with 95% conventional diesel.

<sup>&</sup>lt;sup>22</sup> Excludes B100 biodiesel as the corresponding conversion factor is not available. Relevant conversion factors sourced from '2014 Key World Energy Statistics of International Energy Agency' and 'BP Statistical Review of World Energy June 2015' were applied.

<sup>&</sup>lt;sup>23</sup> GHG emissions are reported for the calendar year. The methodologies and emission factors applied for the development of GHG emissions inventory were in accordance with the 'Guidelines to Account for and Report on Greenhouse Gas Emissions and Removals for Buildings (Commercial, Residential or Institutional Purposes) in Hong Kong, 2010 Edition' issued by Electrical and Mechanical Services Department (EMSD) and EPD. AAHK follows the operational control approach in defining its organisational boundary which covers buildings and facilities that AAHK has control over. The inventory covered seven types of GHG, namely carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF<sub>6</sub>) and chlorodifluoromethane (HCFC-22). The inventory of GHG emissions has been verified by SGS Hong Kong Limited. Please refer to the Greenhouse Gas Verification Statement on page 90.

<sup>&</sup>lt;sup>24</sup> The emission factor for each respective year as provided by CLP Power Hong Kong Limited, AAHK's electricity provider, was applied.

<sup>&</sup>lt;sup>25</sup> Scope 3 emissions are the GHG generated from paper disposal at landfill and electricity consumption for processing fresh water and sewage. <sup>26</sup> One WLU is equal to one passenger or 100kg of cargo.

<sup>&</sup>lt;sup>+</sup> As part of its commitment to disclose relevant sustainability data to its stakeholders, AAHK commenced reporting on these indicators in 2013/14.

	Unit	2014/15	2013/14	2012/13	2011/12
Waste management					
Waste sent to landfill	Tonnes	21,934	21,167	18,196	17,054
Waste collected for recycling					
- Paper and cardboard	Tonnes	2,578	2,474	1,840	1,599
- Plastic	Tonnes	142	128	78	53
- Metal and cans	Tonnes	97	82	58	48
- Wooden pallets and boxes	Tonnes	5	10	14	52
- Glass	Tonnes	2	5	7	11
- Food waste					
- To compost	Tonnes	87	83	77	73
- To fishmeal <sup>27</sup>	Tonnes	1,150	1,352	1,180	1,061
- Surplus food via the HKIA Food Rescue Programme <sup>28</sup>	Tonnes	17.5	8.7	-	-
- Waste cooking oil	Litres	29,295	47,168	19,108	53,196
Chemical waste collected <sup>29</sup>	Tonnes	10	21	19	9
Water management <sup>30</sup>					
Water withdrawal by source					
- Seawater	m <sup>3</sup> ('000)	85,788	78,988	79,333	83,050
- Municipal water	m <sup>3</sup> ('000)	656	709	438	424
Water recycled / reused	m <sup>3</sup> ('000)	179	154	210	199
Total water discharge <sup>31</sup>	m <sup>3</sup> ('000)	477	555	228	225
Other					
Aircraft fuel spillage	Number of spills	12	24	15	2

<sup>&</sup>lt;sup>27</sup> Includes food waste collected by AAHK from its own facilities and from airport business partners.

<sup>&</sup>lt;sup>28</sup> The HKIA Food Rescue Programme was launched in August 2013.

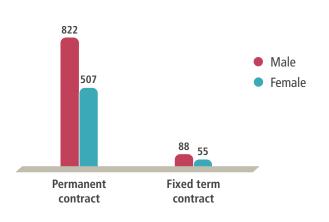
<sup>&</sup>lt;sup>29</sup> AAHK adopts the 'chemical waste' categorisation as specified under the Waste Disposal Ordinance (Chapter 354, The Laws of Hong Kong). The figure includes waste lubricating oil and used mercury-containing fluorescent tubes collected by registered chemical waste collector for disposal.

<sup>&</sup>lt;sup>30</sup> AAHK adopts a "triple water system" to improve the efficiency of its three major water sources: freshwater, seawater and treated wastewater, details of which are available on our website (2 page 97).

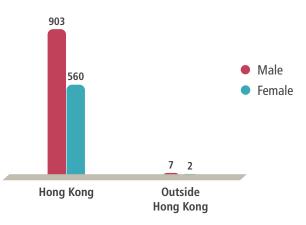
<sup>&</sup>lt;sup>31</sup> The volume of water discharge is estimated by subtracting the volume of water recycled from AAHK's municipal water consumption. Under the Water Pollution Control Ordinance (Chapter 358, The Laws of Hong Kong), AAHK holds a number of licences which require the monitoring of water quality using the following parameters: flow rate (m<sup>3</sup>/day), total residue chlorine, amines, temperature, antifoulant, suspended solids, chemical oxygen demand, oil and grease, surfactants (total), biochemical oxygen demand, total phosphorus and formaldehyde. In 2014/15, all discharges were in compliance with licence discharge limits.

	Unit	2014/15	2013/14	2012/13	2011/12
Workplace Performance					
Analysis of workforce					
Total employees <sup>32</sup>	Number	1,472	1,372	1,284	1,118
By employee category					
- Senior management	Number	38	34	35	30
- Professional / Managerial staff	Number	507	463	419	369
- Supporting staff	Number	927	875	830	719
By employment contract					
- Permanent	Number	1,329	1,241	1,165	1,071
- Fixed term	Number	143	131	119	47
By gender					
- Male	%	62	62	63	62
- Female	%	38	38	37	38
By age group					
-Below 30	%	17	16	15	13
- 30 to 39	%	27	27	26	26
-40 to 49	%	31	33	36	39
- 50 or above	%	25	24	23	22
By location <sup>+</sup>					
- Hong Kong	%	99	99	-	-
- Outside Hong Kong	%	1	1	-	-

## • Number of employees by employment contract • and gender as at 31 March 2015



## Number of employees by location and gender as at 31 March 2015



<sup>32</sup> Includes employees of AAHK's wholly owned subsidiary, HKIA Precious Metals Depository Limited (2014/15: 3) and excludes temporary staff (2014/15: 6). All employees are full-time employees.

<sup>+</sup> As part of its commitment to disclose relevant sustainability data to its stakeholders, AAHK commenced reporting on these indicators in 2013/14.

Ratio of basic salary<sup>#</sup> of women to men
 by employee category in 2014/15



- # Basic salary is a fixed, minimum amount paid to an employee for performing his/her duties. This does not include any additional remuneration.
- Percentage of employees by employee category
   and gender as at 31 March 2015



Percentage of employees by employee category
 and ethnic origin as at 31 March 2015



- Unit 2014/15 2013/14 2012/13 2011/12 New hires and leavers<sup>33</sup> New hires 157 Number 252 208 288 % New hire rate 22.4 17.1 15.2 14.0 Turnover Number 157 103 115 91 % 11.1 7.6 Turnover rate 9.4 8.4
- <sup>33</sup> All new hires and leavers in 2014/15 were based in Hong Kong. The number of leavers and turnover rate exclude involuntary termination and temporary staff. New hire rate is calculated using the total number of employees at the end of the reporting period. Turnover rate is calculated using the average number of employees for the fiscal year.

 Ratio of basic remuneration<sup>^</sup> of women to men • by employee category in 2014/15



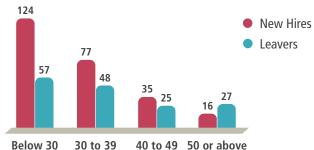
- ^ Remuneration is basic salary plus additional amounts such as those based on years of service, bonuses, benefit payments, and any additional allowance.
- Percentage of employees by employee category
   and age group as at 31 March 2015







## Number of new hires and leavers by age group in 2014/15



	Unit	2014/15	2013/14	2012/13	2011/12
Employee training					
Total hours of employee training	Hours	26,284	32,011	28,427	16,803
Average hours of employee training <sup>34</sup>	Hours	18.5	23.8	23.2	15.4
By training type					
- In-house training programmes	Hours	7,062	14,442	9,439	5,215
- E-learning programmes	Hours	3,077	3,653	3,512	2,171
- Operational and technical (external) training	Hours	16,144	13,916	15,476	9,417
Human rights training <sup>35+</sup>					
- Total hours of human rights training provided	Hours	751	1,829	-	-
- Percentage of employees trained	%	60.5	98.3	-	-
Anti-corruption training <sup>+</sup>					
- Percentage of management employees trained during the year	%	10.7	10.3	-	-
- Percentage of non-management employees trained during the year	%	21.0	13.0	-	-

#### • In-house training hours by training category in 2014/15 •



<sup>34</sup> The figures reflect the total hours of employee training during the year (which include training hours of both active staff and leavers) per the average headcount of the fiscal year.

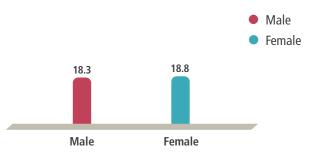
<sup>35</sup> Training topics include corporate governance, code of conduct, data privacy, equal opportunities and anti-discrimination.

<sup>+</sup> As part of its commitment to disclose relevant sustainability data to its stakeholders, AAHK commenced reporting on these indicators in 2013/14.

• Average hours of training per employee • by employee category in 2014/15

## Average hours of training per employee by gender in 2014/15





2014/15	Unit	Male	Female	Total	
Occupational health and safety <sup>36</sup>					
Injuries <sup>37</sup>	Number	2	2	4	
Injury rate	%	0.2	0.4	0.3	
Lost days	Number	67	196	263	
Lost day rate	%	0.02	0.10	0.05	
Absentee rate	%	1.0	1.9	1.4	
Family-friendly practice					
Employees who took maternity / paternity leave38	Number	21	10	31	
Return to work rate after leave	%	100	100	100	
Retention rate after 12 months <sup>39</sup>	%	100	100	100	

	Unit	2014/15	2013/14	2012/13	2011/12
Social Performance					
Financial donations <sup>40</sup>	HK\$'000	1,654	3,418	2,287	684
Employee volunteers <sup>+</sup>	Number	90	104	-	-
Volunteer hours contributed <sup>+</sup>	Hours	1,165	1,406	-	-
Volunteer activities organised <sup>+</sup>	Number	5	9	-	-

<sup>&</sup>lt;sup>36</sup> There were no occupational disease cases or work-related fatalities during the reporting period. The injury rate indicates the number of occupational injuries as a percentage of the total number of employees during the reporting period. The lost day rate and absentee rate indicate respectively the number of lost days (as a result of occupational injuries) and the number of absentee days (as a result of occupational injuries and other illnesses) as a percentage of the total number of employees working throughout the year (365 calendar days).

<sup>&</sup>lt;sup>37</sup> The four injuries included a slip injury at Integrated Airport Centre (#1), stepping on loose formwork materials at the construction site (#1), being injured by a cabinet door (#1) and an injury sustained while closing a counter door (#1).

<sup>&</sup>lt;sup>38</sup> Male and female employees who have been in continuous employment with AAHK for six months and not less than 40 weeks respectively prior to the commencement of the parental leave are eligible for paid parental leave.

<sup>&</sup>lt;sup>39</sup> Retention rate is the total number of employees retained 12 months after returning to work following a period of parental leave over the total number of employees returning from parental leave in the previous reporting period (i.e., 2013/14).

<sup>&</sup>lt;sup>40</sup> Donations made were funded partly from the sales of "lost & found" items at the airport. Funds donated through the HKIA Environmental Fund are included.

<sup>&</sup>lt;sup>†</sup> AAHK employees serve the community by participating in the volunteer activities organised by AAHK's social service group. Volunteer hours include the hours contributed by employees and their guests. As part of its commitment to disclose relevant sustainability data to its stakeholders, AAHK commenced reporting on these indicators in 2013/14.

## INDEPENDENT VERIFICATION

#### 

#### VERIFICATION STATEMENT

#### Scope and Objective

Hong Kong Quality Assurance Agency ("HKQAA") has been commissioned by Airport Authority Hong Kong ("AAHK") to conduct an independent verification of its Sustainability Report 2014/15 ("the Report"). The Report articulates AAHK's sustainability commitments and efforts during the period 1<sup>st</sup> April 2014 to 31<sup>st</sup> March 2015. The Report focuses on the most material sustainability issues corresponding to AAHK's business in Hong Kong over which it has direct management control.

The aim of this verification is to provide a reasonable assurance on the reliability of the report content. The Report is prepared 'in accordance' with the Global Reporting Initiative (GRI) G4 Sustainability Reporting Guidelines and the Airport Operators Sector Disclosures: the Core option.

#### Methodology

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. Other references such as AAHK's Annual Report and other external publications were also cross examined. Accuracy and reliability of the sampled aggregated information and data were tested. Also, AAHK's data management mechanism was reviewed to confirm the extent of reliability. Examples of reference guidelines for the verification process include:

- International Standard on Assurance Engagement 3000 (ISAE 3000) "Assurance Engagement Other Than Audits or Reviews of Historical Financial Information" issued by the International Auditing and Assurance Standards Board
- GRI G4 Sustainability Reporting Guidelines and the Airport Operators Sector Disclosures

#### Independence

HKQAA was not involved in collecting and calculating data, or in the development of the Report. HKQAA's activities are independent from AAHK. There is no relationship between AAHK and HKQAA beyond the contractual agreement for providing the verification service.

#### Conclusion

Based on the results of the verification process, it is confirmed that the Report has been prepared 'in accordance' with the GRI G4 Sustainability Reporting Guidelines and the Airport Operators Sector Disclosures: the Core option. The Report exemplifies AAHK's commitment to continuous improvement by disclosing its sustainability accountabilities and performance in greater transparency. The report content was determined through a structured and systematic materiality assessment process in which various stakeholder groups were directly engaged. The most material issues are consolidated and presented in the Report.

Overall, the Report provides a balanced representation of AAHK's sustainability performance in the reporting period. It is a prudent and reliable presentation of the material sustainability issues of AAHK in an inclusive and responsive manner.

#### Signed on behalf of Hong Kong Quality Assurance Agency

Connie Sham Head of Audit, Strategic Business September 2015

#### HK/GHG/2015/08/001

#### **Greenhouse Gas Verification Statement**

This inventory of greenhouse gas emissions in 1<sup>st</sup> January 2014 to 31<sup>st</sup> December 2014 of

#### Airport Authority Hong Kong

Terminal 1, Terminal 2, North Satellite Concourse, SkyPier, HKIA Tower, Airport World Trade Centre, Airport Authority Building, Wastewater Treatment Plant, Ground Transportation Centre, Car Park 4, Airfield and Related Infrastructure, Hong Kong International Airport, Lantau, Hong Kong

has been verified according to the principle of ISO14064-3:2006 as meeting the requirements of Guidelines to Account for and Report on Greenhouse (as Emissions and Removals for Buildings (Commercial, Residential or Institutional Purposes) in Hong Kong. 2016 Edition

187,338.37 tonnes of CO2e

Authorised by on

stems & Services Certification Date: 7th September 2015

scope of page 2 of this statement

SGS Hong Kong Limited 5/F, Manhattan Centre, 8 Kwai Cheong Road, Kwai Chung, N.T., Hong Kong

This statement is not valid without the verificatio

## APPENDICES

## Appendix I

#### Primary Services for Airport Management and Development

## Airport Planning & Development

- Airport master planning & land use planning^
- Design & construction work^

#### Safety & Security

- Airport safety management<sup>#</sup>
- Airport security service^
- Customs, immigration & quarantine formalities\*

#### **Ground Handling**

- Aircraft catering\*
- Aircraft fuel supply & refueling\*
- Aircraft maintenance\*
- Cargo handling\*
- Ground service equipment maintenance\*
- Ramp handling\*

#### **Responsible party:**

^ AAHK (including its subsidiaries and contractors)

\* Airport business partners (including franchisees and licensees) and Government departments

# Both

#### Level of control:

- Control activities / services that AAHK (including its subsidiaries and contractors) is directly responsible for
- Guide activities / services that AAHK can guide through contractual agreements with business partners
- Influence activities / services that AAHK can influence through engagement and partnerships with business partners and Government departments

#### Airside, Terminal & Landside Operations

- Apron management<sup>^</sup>
- Baggage handling & reconciliation#
- IT & communications^
- Landscaping<sup>^</sup>
- Passenger service<sup>#</sup>
- Road traffic & car park management^
- Terminal & facilities management^
- Local & cross border transportation\*
- Airline service\*
- Air traffic control\*

#### **Retail & Consumer Activities**

- Customer service^
- Retail, catering & advertising\*

## Appendix II

#### Memberships\*

#### AAHK's Role in Organisations

#### Chair / Co-chair / Vice-chair

- Airport Facilitation Committee
- Airport Security Committee
- Airports Council International Asia-Pacific Regional Environment Committee
- Aviation Fuel Facility Management Association of HKIA
- Cargo Facilitation Committee
- The Permanent Aviation Fuel Facility Community Liaison Group

#### **Committee / Council / Founding Member**

- Aviation Security Committee, Security Bureau
- Business Environment Council (BEC)
- Energy Liaison Group, HKSAR Government
- Hong Kong Trade Development Council Logistics Services Advisory Committee
- Hong Kong General Chamber of Commerce Environment & Sustainability Committee
- Green Council Hong Kong Green Purchasing Charter
- Occupational Safety and Health Council Logistics and Freight Transport Industry Safety and Health Committee
- Occupational Safety and Health Working Group of the Commerce, Industry and Housing Committee of Tuen Mun District Council

#### Member

- Airports Council International World Environment Standing Committee
- Association for Project Management
- BEC's Climate Change Business Forum Advisory Group, Environmental, Social and Governance Advisory Group, Transport and Logistics Advisory Group, and Waste Management Advisory Group
- Hong Kong Logistics Development Council
- NEC Asia Pacific Users' Group
- The Hong Kong Green Building Council
- The Lighthouse Club Hong Kong
- WWF Hong Kong

#### Trustee

• The International Air Cargo Association

\* AAHK does not provide substantive funding beyond routine membership dues, if any, to these organisations.

#### **External Principles and Charters**

#### Principles and Charters (Year of adoption by AAHK)

#### Airport- / Aviation-related

- Airport Authority Ordinance, Chapter 483, The Laws of Hong Kong\* (1995)
- Aerodrome Licensing Requirements, CAD\*(1998)
- ICAO international standards and recommended practices\* (1998)

#### **Corporate Governance**

- Companies Ordinance, Chapter 622 (previously Chapter 32), The Laws of Hong Kong (1998)
- Corporate Governance Code, Appendix 14 of the Listing Rules of Hong Kong Stock Exchange (2002/03)

#### **Environment**

- Clean Air Charter, Hong Kong General Chamber of Commerce & Hong Kong Business Coalition on the Environment (2007)
- Hong Kong Green Purchasing Charter, Green Council (2007)
- Programme on Source Separation of Commercial and Industrial Waste, EPD (2007)
- Aviation Industry Commitment to Action on Climate Change, Enviro.aero (2008)
- Carbon Reduction Charter: Carbon Audit Green Partner, EPD (2008)
- Manifesto for Energy Efficiency in Buildings, World Business Council for Sustainable Development (2012)
- Energy Saving Charter on 'No ILB', Environment Bureau & EMSD (2013)
- Food Wise Charter, EPD (2013)
- 'Let's Save 10L Water' Campaign, Water Supplies Department (2013)
- The Greening Partner Charter, Development Bureau (2013)
- Wood Recycling & Tree Conservation Scheme, Hong Kong Environmental Protection Association (2013)
- Hong Kong Zero Carbon Partnership, The University of Hong Kong (2015)
- Innovation Partner of CarbonCare Open Innovation Lab, CarbonCare InnoLab (2015)

#### Safety

• Occupational Safety Charter, Hong Kong Occupational Safety and Health Council (2001)

#### **Social Responsibility**

- Talent-Wise Employment Charter and Inclusive Organisations Recognition Scheme, Labour and Welfare Bureau (2013)
- 2013/14 Family-Friendly Employers Award Scheme, Family Council (2013)

#### **Others**

• Agreement on Government Procurement of the World Trade Organization\* (1998)

\* AAHK has an obligation to comply with these principles and charters.

## Appendix III

### Awards and Recognition

Organiser	Award / Recognition
Corporate Governance	
Hong Kong Institute of Certified Public Accountants	Gold Award under the "Public Sector/Not-for-profit" category of 2014 Best Corporate Governance Disclosure Awards
Customer Experience	
Airports Council International	• Top five airports in the Best Airport by Size (over 40M) category in 2014 Airport Service Quality (ASQ) Awards
Hong Kong Association for Customer Service Excellence	<ul> <li>Customer Service Excellence Award 2014         <ul> <li>Service Appreciation Award – Gold Award</li> </ul> </li> </ul>
	– Team Award (Counter Service) – Gold Award
	– Individual Award (Internal Support Service) – Merit
Environment	
Airports Council International	<ul> <li>Airport Carbon Accreditation programme – "Optimisation" Level</li> </ul>
Cargonews Asia	28th Asian Freight and Supply Chain Awards – Best Green Airport
CLP Power Hong Kong Limited	<ul> <li>"Energy Saving Award of Excellence" at GREEN<sup>PLUS</sup> Recognition Award 2014</li> </ul>
Environmental Campaign Committee	<ul> <li>2014 Hong Kong Awards for Environmental Excellence</li> <li>– Gold Award (Public Organisations &amp; Utilities Sector)</li> </ul>
	<ul> <li>Hong Kong Green Organisation Certification         <ul> <li>Wastewi\$e Certificate: Excellence Level</li> </ul> </li> </ul>
	<ul> <li>Energywi\$e Certificate: Excellence Level (one of the top three biggest energy-saving organisations)</li> </ul>
	– IAQwi\$e Certificate: Good Level
	– Carbon Reduction Certificate
EPD	<ul> <li>Commendation Scheme on Source Separation of Commercial and Industrial Waste 2013/14 – Bronze Award (Other Building Types)</li> </ul>
Friends of the Earth (HK)	<ul> <li>Take a "Brake" Low Carbon Action – Corporate Green Driving Award Scheme 2014: Gold Tier under the "Fuel Efficiency Improvement" and "Fuel Consumption Saver" categories</li> </ul>
	Power Smart 2014 – Certificate of Appreciation
Green Council	<ul> <li>Hong Kong Green Awards 2014 Corporate Green Governance Award         <ul> <li>Environmental Monitoring and Reporting</li> </ul> </li> </ul>
World Green Organisation	Green Office Awards Labelling Scheme – "Green Office" Label
	United Nations Millennium Development Goals'     "Better World Company" Label

Organiser	Award / Recognition
Operation	
Air Cargo World	<ul> <li>Air Cargo Excellence Award – Asian Diamond Winner (1 million tonnes or more category)</li> </ul>
Asia Cargo News	• 2015 Asian Freight, Logistics and Supply Chain Awards – Best Airport – Asia
Hong Kong Quality Assurance Agency	<ul> <li>AAHK and EMSD jointly obtained the PAS 55 and ISO 55001 certification of asset management system for the maintenance services of airfield ground lighting system</li> </ul>
Safety	
Occupational Safety and Health Council	<ul> <li>13<sup>th</sup> Hong Kong Occupational Safety and Health Award</li> <li>– Safety Performance Award – Other Industries</li> <li>– Silver Award for Safety Culture</li> </ul>
The Lighthouse Club and Construction Industry Council	<ul> <li>The Derek Smyth Safety Leadership Awards 2015</li> <li>– Gold Award under 'Client-Developer' Category</li> </ul>
Social Responsibility	
Community Investment and Inclusion Fund, Labour and Welfare Bureau	2014-16 Social Capital Builder Award
Hong Kong Council of Social Service	10 Years Plus Caring Organisation Logo
Family Council	2013/14 Family-Friendly Employers Award Scheme (Organisations Category)
The Office of the Government Chief Information Officer and the Equal Opportunities Commission	<ul> <li>Web Accessibility Recognition Scheme 2015         <ul> <li>Gold Award (Website stream)</li> </ul> </li> </ul>
	– Gold Award (Mobile app stream)
	– My Flight – Most Favourite Mobile Apps

## GLOSSARY

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ACI	Airports Council International
	Alipoits Council international
APU(s)	Auxiliary Power Unit(s)
ARA	Airport Restricted Area
ASMS	Aerodrome Safety Management System
	Airport Service Quality, the world-renowned and globally established global benchmarking programme measuring passengers' satisfaction whilst they are travelling through an airport
AVL	Airside Vehicle License
	Aviation Security Company Limited, a partly owned subsidiary of AAHK
A-CDM	Airport Collaborative Decision Making
	A globally recognised, comprehensive environmental assessment scheme for buildings
CAD	Civil Aviation Department, HKSAR Government
	Committee on Aviation Environmental Protection (of ICAO)
CEO	Chief Executive Officer
СОР	Coefficient of Performance
CWD(s)	Chinese White Dolphin(s)
	Earnings before interest, taxes, depreciation and amortisation
EDCD	Executive Director, Corporate Development, AAHK
EGSE	Electric Ground Service Equipment
EIA	Environmental Impact Assessment
	Electrical and Mechanical Services Department, HKSAR Government
	Environmental Protection Department, HKSAR Government
EV(s)	Electric Vehicle(s)
FGP	Fixed Ground Power
FIDS	Flight Information Display System
FOD	Foreign Object Damage
GDP	Gross Domestic Product
GHG	Greenhouse gas
Government	HKSAR Government
	Global Positioning System
GPS	Global Positioning System

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GRI (G3.1/G4) Guidelines	GRI (G3.1/G4) Sustainability Reporting Guidelines
GSE	Ground Service Equipment
HKASP	Hong Kong Aviation Security Programme
HKIA	Hong Kong International Airport
HKIARaCE	Hong Kong International Airport Recreation and Community Engagement
HKSAR	Hong Kong Special Administrative Region
HKSTP	Hong Kong Science and Technology Parks Corporation
HKUST	The Hong Kong University of Science and Technology
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
LTO	Landing and Take-off
MFC	Midfield Concourse
MTR	Mass Transit Railway
NEF	Noise Exposure Forecast
NGO(s)	Non-governmental Organisation(s)
NRMM	Non-road Mobile Machinery
ORR	Operational Risk Register
PAX	Passengers
PCA	Pre-conditioned Air
PRD	Pearl River Delta
REC	Regional Environment Committee (of ACI Asia Pacific)
RFID	Radio Frequency Identification
RTF(s)	Romer's Tree Frog(s)
WESC	World Environment Standing Committee (of ACI)
WLU	Workload Unit (one workload unit is equal to one passenger or 100kg of cargo)
WMTF	Waste Management Task Force
wto gpa	Agreement on Government Procurement of the World Trade Organization
XRL	Express Rail Link
2RS	Two-runway System
3RS	Three-runway System

## WEBSITE INDEX

Page	Description	Website
3	Online feedback form	http://www.hongkongairport.com/survey/sreport/2014_15/form_en.html
10	Annual Report 2014/15	http://www.hongkongairport.com/eng/pdf/media/publication/ report/14_15/flipping/index.html
12	Business Development Committee Terms of Reference	http://www.hongkongairport.com/eng/business/airport-authority/ business-development-committee-terms.html
25	HKIA Master Plan 2030	http://www.threerunwaysystem.com/en/Information/ Airport_master_plan_2030.aspx
30	Tenders & Notices	https://www.hongkongairport.com/eng/business/airport-authority/ business-opportunities/?invitation-to-tender
31	ePROS website	http://epros.hkairport.com/en/index.aspx
38	HKIA 3RS website	http://www.threerunwaysystem.com/en
55	HKIA website	http://www.hongkongairport.com/eng/index.html
64	Air quality monitoring	http://www.hongkongairport.com/eng/csr/environmental-management/ air-quality/current-api.html
64	Hong Kong Air Pollutant Emission Inventory	http://www.epd.gov.hk/epd/english/environmentinhk/air/data/ emission_inve.html
69	CAD website	http://www.cad.gov.hk/english/ac_noise.html
85	Water management	http://www.hongkongairport.com/eng/csr/environmental-management/ water-management.html

## GRI CONTENT INDEX



Airport Authority Hong Kong (AAHK)'s Sustainability Report 2014/15 was prepared 'in accordance' with the Global Reporting Initiative (GRI) G4 Sustainability Reporting Guidelines and Airport Operators Sector Disclosures: the Core option. The information reported against the recommended disclosures of the abovementioned guidelines is clearly referenced as set out below.

GRI Indicator	Description	Sustainability Report 2014/15 section or Annual Report 2014/15 (page number) / Other References	AAHK's Direct Response
General S	tandard Disclosures		
Strategy a	nd Analysis		
G4-1	Statement from the most senior decision-maker of the organisation	<ul> <li>Message from the Chairman (pages 4 to 5)</li> <li>Message from the CEO (pages 6 to 7)</li> </ul>	
Organisati	onal Profile		
G4-3	Name of the organisation		Airport Authority Hong Kong
G4-4	Primary brands, products and services	• About Airport Authority Hong Kong (pages 8 to 10)	
G4-5	Location of organisation's headquarters	• About Airport Authority Hong Kong (page 8)	
G4-6	Number of countries where the organisation operates	• About Airport Authority Hong Kong (pages 8 to 9)	
G4-7	Nature of ownership and legal form	• About Airport Authority Hong Kong (page 8)	
G4-8	Markets served	<ul> <li>Economic Contribution (pages 25 and 28)</li> <li>Performance Indicators (pages 82 to 83)</li> <li>Annual Report 2014/15 (pages 49, 72, 76, 136)</li> </ul>	
G4-9	Scale of the organisation	<ul> <li>About Airport Authority Hong Kong (page 9)</li> <li>Economic Contribution (page 25)</li> <li>Performance Indicators (pages 82 to 83, 86)</li> <li>Annual Report 2014/15 (pages 75, 82, 112)</li> <li>Website: HKIA Fact Sheets</li> </ul>	

GRI Indicator	Description	Sustainability Report 2014/15 section or Annual Report 2014/15 (page number) / Other References	AAHK's Direct Response
G4-10	Number of employees	• Performance Indicators (page 86)	
G4-11	Percentage of employees covered by collective bargaining agreements		Not reported – The majority of AAHK employees are in Hong Kong where there is no statutory recognition of collective bargaining agreements.
G4-12	The organisation's supply chain	• Economic Contribution (pages 29 to 31)	
G4-13	Significant changes during the reporting period regarding the organisation's size, structure, ownership, or its supply chain		There were no significant changes during the reporting period regarding AAHK's size, structure or ownership. As supply chain description is reported for the first time, AAHK did not capture significant changes during the reporting period in its supply chain compared to previous year.
G4-14	Precautionary approach or principle	<ul> <li>Our Approach to Sustainability (pages 11 to 12)</li> <li>Annual Report 2014/15 (pages 36 to 39)</li> </ul>	
G4-15	Adoption of external charters, principles or initiatives	• Appendices (page 93)	
G4-16	Memberships of associations and advocacy organisations	• Appendices (page 92)	
Identified M	Material Aspects and Boundaries		
G4-17	Entities included in consolidated financial statements and not covered by this report	<ul> <li>About this Report (page 3)</li> <li>Annual Report 2014/15 (pages 99 to 102)</li> </ul>	
G4-18	Process for defining the report content and the aspect boundaries	<ul> <li>About this Report (page 3)</li> <li>Materiality Assessment (pages 13 to 15)</li> </ul>	
G4-19	Material aspects identified in the process of defining report content	<ul> <li>Materiality Assessment (pages 14 to 15)</li> <li>GRI Content Index (pages 100 to 107)</li> </ul>	
G4-20	Aspect boundary within the organisation for each material aspect	• Materiality Assessment (page 14)	
G4-21	Aspect boundary outside the organisation for each material aspect	• Materiality Assessment (page 14)	
G4-22	Restatement of information	<ul> <li>About this Report (page 3)</li> <li>Performance Indicators (page 82)</li> </ul>	
G4-23	Significant changes from previous reporting periods in the scope and aspect boundary	<ul> <li>About this Report (page 3)</li> <li>Materiality Assessment (page 16)</li> </ul>	

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GRI	Description	Sustainability Report 2014/15	AAHK's Direct Response
Indicator		section or Annual Report 2014/15	
		(page number) / Other References	

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#### Stakeholder Engagement

G4-24	Stakeholder groups engaged	<ul> <li>Materiality Assessment (page 16)</li> <li>Stakeholder Engagement (pages 20 to 21)</li> </ul>	
G4-25	Identification and selection of stakeholders	<ul> <li>Materiality Assessment (page 16)</li> <li>Stakeholder Engagement (page 19)</li> </ul>	
G4-26	Stakeholder engagement approach	<ul> <li>Materiality Assessment (page 13)</li> <li>Stakeholder Engagement (pages 20 to 21)</li> </ul>	
G4-27	Key topics and concerns raised by stakeholders and the organisation's response	<ul> <li>Materiality Assessment (pages 14 to 18)</li> <li>Stakeholder Engagement (pages 20 to 21)</li> </ul>	

#### **Report Profile**

G4-28	Reporting period	• About this Report (page 3)	
G4-29	Date of most recent previous report	<ul><li> About this Report (page 3)</li><li> Our Approach to Sustainability (page 12)</li></ul>	
G4-30	Reporting cycle	• About this Report (page 3)	
G4-31	Contact point	• About this Report (page 3)	
G4-32	GRI Content Index	<ul> <li>About this Report (page 3)</li> <li>GRI Content Index (pages 98 to 105)</li> </ul>	
G4-33	External assurance	<ul> <li>About this Report (page 3)</li> <li>Independent Verification (page 90)</li> </ul>	

#### Governance

G4-34	Governance structure	• Our Approach to Sustainability
		(pages 11 to 12) • Annual Report 2014/15 (page 16)

**Ethics and Integrity** 

G4-56	Values, principles, standards and	• About Airport Authority Hong Kong (page 8)	
	norms of behaviour	<ul> <li>People and Community (page 74)</li> </ul>	

Specific Standard Disclosures

#### Economic

Aspect: Eco	nomic Performance		
G4-DMA	Disclosures on management approach	<ul> <li>Economic Contribution (page 25)</li> <li>Airport Growth (pages 35 to 37)</li> <li>Annual Report 2014/15 (pages 71 to 76)</li> </ul>	
G4-EC1	Direct economic value generated and distributed	• Performance Indicators (page 82)	

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GRI Indicator	Description	Sustainability Report 2014/15 section or Annual Report 2014/15 (page number) / Other References	AAHK's Direct Response
G4-EC3	Coverage of the organisation's defined benefit plan obligations	• Annual Report 2014/15 (pages 107 to 110)	
G4-EC4	Financial assistance received from government		AAHK did not receive any material financial assistance from the HKSAR Government during the reporting period.
Aspect: Ma	rket Presence		
G4-DMA	Disclosures on management approach	<ul> <li>Economic Contribution (pages 27 to 28)</li> <li>Annual Report 2014/15 (pages 42 and 53)</li> </ul>	
G4-A01	Total number of passengers annually	• Performance Indicators (page 82)	
G4-AO2	Total annual number of aircraft movements	• Performance Indicators (page 82)	
G4-A03	Total amount of cargo tonnage	Performance Indicators (page 82)	
Aspect: Ind	irect Economic Impacts		
G4-DMA	Disclosures on management approach	<ul> <li>Economic Contribution (pages 25 to 26)</li> <li>Website: Hong Kong International Airport Master Plan 2030</li> <li>Economic Impact Study (2015)</li> </ul>	
G4-EC7	Development and impact of infrastructure investments and services supported	<ul> <li>Economic Contribution (pages 26 to 28)</li> <li>Airport Growth (pages 35 to 39)</li> <li>Three-runway System</li> <li>Website: Environmental Impact Assessment</li> <li>Website: Economic Benefits</li> </ul>	
G4-EC8	Significant indirect economic impacts, including the extent of impacts	<ul> <li>Economic Contribution (pages 25 to 26)</li> <li>Three-runway System</li> <li>Website: Economic Benefits</li> <li>Economic Impact Study (2015)</li> </ul>	

#### Aspect: Procurement Practices\*

(	G4-DMA	Disclosures on management approach	• Economic Contribution (pages 29 to 31)	
(	G4-EC9	Proportion of spending on local suppliers	• Economic Contribution (page 29)	

Environmental

Aspect: Energy				
G4-DMA	Disclosures on management approach	<ul> <li>Environment (pages 59 to 60, 62 to 63)</li> <li>Website: Energy</li> </ul>		

GRI Indicator	Description	Sustainability Report 2014/15 section or Annual Report 2014/15 (page number) / Other References	AAHK's Direct Response
•• •• •• ••	•• •• •• •• •• •• •• •• •• ••		
G4-EN3	Energy consumption within the organisation	<ul><li>Environment (page 62)</li><li>Performance Indicators (page 84)</li></ul>	
G4-EN5	Energy intensity	<ul><li>Environment (page 62)</li><li>Performance Indicators (page 84)</li></ul>	
Aspect: Em	issions		
G4-DMA	Disclosures on management approach	• Environment (pages 59 to 60, 62 to 65)	
G4-EN15	Direct GHG emissions (Scope 1)	• Performance Indicators (page 84)	
G4-EN16	Energy indirect GHG emissions (Scope 2)	• Performance Indicators (page 84)	
G4-EN17	Other indirect GHG emissions (Scope 3)	• Performance Indicators (page 84)	
G4-EN18	GHG emissions intensity	• Performance Indicators (page 84)	
G4-EN21	$NO_X$ , $SO_X$ , and other significant air emissions	• Environment (page 64)	
G4-A05	Ambient air quality levels	<ul> <li>Environment (page 64)</li> <li>Website: Air quality</li> </ul>	

#### Aspect: Effluents and Waste

G4-DMA	Disclosures on management approach	• Environment (pages 58 to 60, 63 to 64)	
G4-EN22	Water discharge by quality and destination*	• Performance Indicators (page 85)	
G4-EN23	Waste by type and disposal method	• Performance Indicators (page 85)	The amount of waste from international flights (i.e. cabin waste) is not reported as the data is not available. AAHK plans to estimate and report this data in the next sustainability report.

#### Aspect: Products and Services

G4-DMA	Disclosures on management approach	<ul><li>Airport Growth (pages 34, 38, 40 to 41)</li><li>Environment (pages 59 to 60, 69)</li></ul>	
G4-EN27	Extent of impact mitigation of environmental impacts of products and services	<ul><li>Airport Growth (pages 34, 38, 40 to 41)</li><li>Environment (pages 62 to 69)</li></ul>	

#### Aspect: Compliance – Environment

G4-DMA	Disclosures on management approach	<ul> <li>Airport Growth (pages 34 and 38)</li> <li>Environment (pages 59 to 60)</li> <li>Annual Report 2014/15 (page 38)</li> </ul>	
G4-EN29	Significant fines and sanctions for non-compliance with environmental laws and regulations		There were no significant fines or non-monetary sanctions during the reporting period for environmental non-compliance.

GRI Indicator	Description	Sustainability Report 2014/15 section or Annual Report 2014/15 (page number) / Other References	AAHK's Direct Response
Aspect: Bio	odiversity*		• •• •• •• •• •• •• •• ••
G4-DMA	Disclosures on management approach	<ul> <li>Environment (page 68)</li> <li>Sustainability Report 2013/14 – Wildlife Hazard Management (page 26)</li> </ul>	
G4-EN11	Land in or adjacent to areas of high biodiversity value	• Environment (page 68)	
G4-EN12	Significant impacts on biodiversity	• Environment (page 68)	
Aspect: No	ise*		
G4-DMA	Disclosures on management approach	• Environment (page 69)	
G4-A07	People residing in areas affected by noise	• Environment (page 69)	
Aspect: Wa	iter*		
G4-DMA	Disclosures on management approach	• Website: Water management	
G4-EN8	Water withdrawal by source	Performance Indicators (page 85)	
G4-EN10	Water recycled and reused	Performance Indicators (page 85)	
G4-AO4	Quality of storm water	Performance Indicators (page 85)	
Labour Pr	actices		
Aspect: Em	ployment		
G4-DMA	Disclosures on management approach	<ul> <li>People and Community (pages 70 to 74)</li> <li>Objectives and Targets (page 81)</li> </ul>	
G4-LA1	New hires and employee turnover	• Performance Indicators (pages 87 to 88)	

G4-LA2	Benefits provided to full-time employees	• People and Community (page 75)	
G4-LA3	Return to work and retention rates after parental leave	• Performance Indicators (page 89)	

#### Aspect: Occupational Health and Safety

G4-DMA	Disclosures on management approach	<ul> <li>Operational Excellence (pages 45 to 47)</li> <li>People and Community (page 75)</li> <li>Objectives and Targets (page 80)</li> </ul>	
G4-LA6	Injuries, occupational diseases, lost days, absenteeism and work- related fatalities	<ul> <li>Operational Excellence (pages 45 to 46)</li> <li>Performance Indicators (page 89)</li> </ul>	

GRI Indicator	Description	Sustainability Report 2014/15 section or Annual Report 2014/15 (page number) / Other References	AAHK's Direct Response
Aspect: Tra	ining and Education		
G4-LA9	Average hours of training per year per employee	• Performance Indicators (pages 88 to 89)	
Aspect: Div	versity and Equal Opportunity*		
G4-LA12	Composition of Board and employees according to indicators of diversity	<ul><li>Performance Indicators (page 86)</li><li>Annual Report 2014/15 (page 17)</li></ul>	
Aspect: Equ	ual Remuneration for Women and M	en*	
G4-LA13	Ratio of basic salary and remuneration of women to men	• Performance Indicators (page 87)	
Society			
Aspect: An	ti-corruption		
G4-DMA	Disclosures on management approach	<ul><li>People and Community (page 74)</li><li>Annual Report 2014/15 (page 32)</li></ul>	
G4-SO4	Anti-corruption policies and procedures	• People and Community (page 74)	
G4-SO5	Incidents of corruption and actions taken		There were no confirmed incidents of corruption during the reporting period
Aspect: Cor	mpliance		
G4-DMA	Disclosures on management approach	• Annual Report 2014/15 (pages 28, 33 and 39)	
G4-SO8	Significant fines and sanctions for non-compliance with laws and regulations		There were no significant fines and sanctions for legal and regulatory non-compliance during the reporting period.
Aspect: Loc	al Communities*		
G4-DMA	Disclosures on management approach	<ul> <li>Stakeholder Engagement (pages 19 to 21)</li> <li>Economic Contribution (pages 25 to 26)</li> <li>Airport Growth (page 38)</li> <li>Environment (pages 68 to 69)</li> <li>People and Community (pages 77 to 78)</li> </ul>	
G4-SO1	Local community engagement, impact assessments, and development programs	<ul> <li>Stakeholder Engagement (pages 19 to 21)</li> <li>Economic Contribution (pages 25 to 26)</li> <li>Environment (pages 68 to 69)</li> <li>People and Community (pages 77 to 78)</li> <li>Website: Three-runway system</li> </ul>	
G4-SO2	Negative impacts on local communities	<ul><li>Airport Growth (page 38)</li><li>Environment (pages 64, 68 to 69)</li></ul>	

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GRI Indicator	Description	Sustainability Report 2014/15 section or Annual Report 2014/15 (page number) / Other References	AAHK's Direct Response
Product R	esponsibility		
Aspect: Cu	stomer Health and Safety		
G4-DMA	Disclosures on management approach	• Operational Excellence (pages 45 to 46)	
G4-AO9	Wildlife strikes	<ul> <li>Performance Indicators (page 83)</li> <li>Sustainability Report 2013/14 – Wildlife Hazard Management (page 26)</li> </ul>	
Aspect: Bus	siness Continuation and Emergency F	Preparedness	
G4-DMA	Disclosures on management approach	• Operational Excellence (pages 49 to 50)	
Aspect: Ser	vice Quality		
G4-DMA	Disclosures on management approach	• Operational Excellence (pages 52 to 53)	
Aspect: Co	mpliance – Product Responsibility		
G4-DMA	Disclosures on management approach	• Annual Report 2014/15 (pages 29, 36 and 45)	
G4-PR9	Significant fines for non-compliance with laws and regulations concerning the provision and use of services		There were no significant fines for non-compliance with laws and regulations concerning the provision and use of services during the reporting period.
Aspect: Pro	vision of Services or Facilities for Per	sons with Special Needs*	
G4-DMA	Disclosures on management approach	• Operational Excellence (page 55)	

\* GRI aspects and indicators that were not identified as material, but still reported on.

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## Correlation between AAHK's 18 Most Important Sustainability Issues and GRI G4 Aspects

•• ••	Material issues – Definitions	Related GRI G4 Aspects
Econ	omic and Society	
1	Connectivity – Reinforce HKIA's status as an international and regional aviation hub.	Market Presence
2	Economic contribution – HKIA's direct and indirect economic contributions to Hong Kong (including contribution to employment and GDP).	<ul><li>Economic Performance</li><li>Indirect Economic Impacts</li><li>Market Presence</li></ul>
3	Labour shortage – AAHK's approach to help address labour shortage at HKIA, including transportation for airport staff.	
Oper	ating Practices	
4	Airport safety and security – Provide and maintain a safe aerodrome, and ensure the safety and security of passengers, employees, cargo and other operators at HKIA.	Customer Health and Safety
5	Compliance with laws and regulations – AAHK's approach to ensuring compliance with laws and regulations applicable to its own operation.	<ul> <li>Compliance (under Environmental, Society and Product Responsibility)</li> </ul>
6	Capacity constraints – Address HKIA's capacity constraints under the two- runway system in light of rising air traffic demand.	<ul><li>Economic Performance</li><li>Indirect Economic Impacts</li><li>Service Quality</li></ul>
7	Contingency planning – Identify and manage potentially disruptive situations, and respond and recover airport operation from disruptions and crises.	Business Continuation and Emergency Preparedness
8	Customer experience – Monitor, manage and maintain the highest standards of service quality and enhance customer experience.	• Service Quality
Envir	onment	
9	Environmental management – AAHK's overall environmental management strategy, system and investment, including for the Three-Runway System project.	<ul> <li>Environmental (category)</li> <li>Products and Services</li> </ul>
10	Air quality – Manage air emissions generated from the operation and development of HKIA and monitor the air quality around HKIA.	• Emissions
11	Carbon and energy management – Monitor and manage energy consumption of AAHK's buildings and facilities and the greenhouse gas emissions generated from the operation and development of HKIA.	<ul><li>Energy</li><li>Emissions</li></ul>
12	Waste – Monitor and manage solid waste generated from AAHK's own operation, aircraft cabin waste and waste from terminal buildings.	Effluents and Waste

•••••	Material issues – Definitions	Related GRI G4 Aspects			
Peop	People				
13	Ethics and integrity – AAHK's approach to building a culture of ethics and integrity among its own staff and relevant stakeholders such as contractors and suppliers.	<ul> <li>Ethics and Integrity (General standard disclosure)</li> <li>Anti-corruption</li> </ul>			
14	Occupational health and safety – Provide a safe and healthy work environment for AAHK staff.	Occupational Health and Safety			
15	Retention and turnover – Monitor and manage AAHK's staff retention and turnover.	<ul> <li>Employment</li> <li>Training and Education</li> </ul>			
16	Succession planning – Identify and develop talent at all levels within AAHK to meet evolving business needs and support long-term development.	Labour Practices (category)			
17	Attracting talent – Strengthen AAHK's ability to attract and recruit the right talent.	• Employment			
18	Employee well-being – Enhance AAHK's employee well-being.	<ul> <li>Employment</li> <li>Occupational Health and Safety</li> </ul>			

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