

ASIA-PACIFIC AIRPORTS

THE OFFICIAL MAGAZINE OF ACI ASIA-PACIFIC



IN FOCUS: THE GREEN SHOOTS OF RECOVERY

Issue 3, 2022

- Interviewed: ACI Asia-Pacific president, Emmanuel Menanteau
- Special report: Queen Alia's sustainability journey
- Plus: ACI Asia-Pacific, Regional and WBP news



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ACI Asia-Pacific president, Emmanuel Menanteau.



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ACI Asia-Pacific is proud to be the voice of airport operators in two of the fastest-growing regions of the world, Asia-Pacific and the Middle East.

Our team of professionals work tirelessly to serve and lead airports in the region with a vision to shape the future of the aviation industry.

Based in Hong Kong SAR, ACI Asia-Pacific is one of five regions of the only global airport trade organisation, Airports Council International (ACI) World.

ACI Asia-Pacific key facts:



126
AIRPORT MEMBERS



5
AFFILIATE AIRPORT MEMBERS



617
OPERATED AIRPORTS



9
ASSOCIATE MEMBERS



46
COUNTRIES/ AREAS



93
WORLD BUSINESS PARTNERS

In 2020, ACI Asia-Pacific airports handled 1.7 billion passengers and 47.9 million tonnes of cargo.



47.9
MILLION TONNES CARGO



1.7
BILLION PASSENGERS

411 accredited airports

58
in North
America

212
in Europe

64
in Asia-Pacific

54
in Latin America
& Caribbean

23
in Africa

Welcoming
4.5 billion
passengers
per year*

in **75**
countries
across
the world

or **49%**
of global air
passenger
traffic*



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* Passenger traffic data refers to 2019



VIEW FROM THE TOP

Director general, Stefano Baronci, reflects on some of the operational, financial and manpower challenges facing the region's airports and provides an overview on ACI Asia-Pacific's latest advocacy efforts.

A sense of normalcy seems to have been restored to the aviation sector in the last few months following the withdrawal of health measures and inbound travel restrictions in most of Asia-Pacific and Middle East, enabling the industry to switch from crisis mode to recovery mode.

The consistent improvement in passenger volumes across the globe is a positive indication of a sustained recovery of the industry following prolonged efforts towards rebuilding passenger confidence in air travel.

Our recent Airport Industry Outlook for the quarter, ending June 2022, indicates that the sector in Asia-Pacific and the Middle East is gradually moving towards clear skies. At this point, the recovery in the region is largely being powered by pent-up demand, particularly for leisure travel.

FACING TURBULENCE

However, despite encouraging trends, the industry is still navigating through strong headwinds, including geopolitical instability in eastern Europe and its subsequent impact on global macro-economics, including high inflation, rising energy prices and disruption to supply chains.

In addition, Asia-Pacific includes some of the most restrictive markets in the world, where compulsory quarantine, travel restrictions, complicated administrative processes, and inbound limitations continue to negatively impact international travel.

As a result of these factors, Asia-Pacific is estimated to lose its dominating position as the world's biggest air passenger market for 2022. The region is estimated to finish second, behind Europe in terms of passenger share, and at a comparable level with North America.

This is because the latest ACI Asia-Pacific forecast indicates that by the end of 2022, passenger traffic in Asia-Pacific (excluding the Middle East) will still only be at around 55% of pre-pandemic levels. This is in stark contrast to other regions where recovery is substantially higher, and indeed estimated to be approximately between 80% and 90% depending on the region.

FINANCIAL STRESS

In spite of an improving trend, airport financial margins also remain significantly below pre-pandemic levels and are not economically sustainable.

ACI Asia-Pacific has been advocating for flexible regulatory policies, innovative procedures, greater efficiency as part of its long-term approach to help airports make a sustainable recovery.

MANPOWER CHALLENGES

As the industry recuperates from the damages caused by the pandemic, the aviation industry is facing a serious shortage of human resources. Due to the manpower shortage, many airlines had to cancel or delay flights, causing airport operations to be paralysed.

Airports have been taking the blame for the manpower shortage, but it is essential to note that crisis is spread heavily across other constituents of aviation industry, including the airlines, government agencies, ground handling operators and security.

This means that even though most airports have efficiently managed their resources, the shortage of staff across aviation's ecosystem has affected, and continues to affect, the entire industry.

Compared to Europe and other parts of the world, the manpower shortage at airports in Asia-Pacific and the Middle East has been less severe and disruptive. This was mainly due to two concurrent factors – the long-term vision of several airports to retain their staff despite the challenging time; and to the moderate recovery of traffic compared to other regions in the world.

Asia-Pacific is estimated to have the slowest recovery, reaching only 55% of 2019 levels by the end of 2022. This is giving our airports and other aviation stakeholders in Asia-Pacific and the Middle East time to address the challenges, and simultaneously work on introducing digital technologies and reskilling and upskilling staff.

When traffic recovers to pre-COVID levels, our airports will be in a better place to handle the increase in passenger footfall as they have already deployed several measures to improve their workforce.

During the pandemic, the aviation industry lost 2.3 million jobs or 21% of its workforce globally. The Asia-Pacific region lost 19% of direct aviation jobs, but 58% of aviation-supported employment due to the large tourism sectors in the region.

Most airports in our region see the labour shortages as a short-term issue (58%), but 32% see it as a medium term, and 10% as a long-term problem.

After two years of travel restrictions and suppressed demand, air travel is now bouncing back in 2022. ACI World's latest Advisory Bulletin expects over six billion passengers across the globe in 2022.

The current surge in passenger traffic is boosted by pent-up demand, and this means the demand is 'peakier' than normal, concentrated around school and public holidays. Many airports are already operating at capacity in peak periods, even if annual traffic is still somewhat below 2019 levels.

The pace of recovery has made airports in the region accelerate their technological implementation as well as strengthen their workforce to cater to the increased demand.

Airports are working towards enhancing training and staff development for reskilling and upskilling, providing a better career development plan and making airports a more attractive place for long-term career.

ADVOCACY

To facilitate the smooth recovery of the industry, ACI Asia-Pacific continues its advocacy efforts across the region to ensure harmonisation of international travel.

We are pleased to state that our continuous dialogue with national authorities has finally paid off. We welcome the decisions by the Governments of Japan, Hong Kong and Chinese Taipei for taking significant steps to relax COVID-related restrictions on international travel.

This will not only restore freedom of travel but also provide the impetus needed for the recovery of the aviation industry. In Hong Kong, more relaxation in rules are required to revitalise the economy. We also hope to see more positive developments coming from China in the coming days.

Elsewhere, at the ICAO DGCA Conference for Asia-Pacific in Incheon, ACI Asia-Pacific made a strong impression, making several recommendations related to the decarbonisation of airports; the need for responsive and flexible regulatory frameworks; the adoption of One-Stop Security; addressing the manpower crisis at airports; and the need for aviation's smooth operational recovery from the pandemic as part of our long-term approach to help airports bounce back from COVID.

CONCLUSION

While the industry has faced extraordinary setbacks and unprecedented circumstances, it is very clear that the aviation sector has the opportunity to transform itself.

A lot can be expected in the coming years as airports are determined to continuously improve the passenger experience and introduce innovative solutions.

Adapting a fresh approach is the key. It is essential for airlines, airports and governments to co-operate and lead from the front to keep pace with changing customer expectations.

INDUSTRY NEWS

We provide a snapshot of some of the latest news stories from across Asia-Pacific and the Middle East.



VINCI AIRPORTS AWARDED CONCESSION FOR FAA'A AIRPORT

VINCI Airports will operate Faa'a International Airport in Tahiti for the next 40 years after being awarded the concession to develop it by the French government.

The main airport and gateway to French Polynesia, Faa'a International Airport – also known as Tahiti International Airport – welcomed 1.5 million passengers in 2019.

The new concession company, 51% owned by VINCI Airports and 49% by French Polynesia, will be responsible for operating, promoting, developing, maintaining and upgrading the airport.

It will also be responsible for designing, financing and carrying out a programme of works to improve service quality and operational efficiency.

VINCI Airports says that its mission will be to ensure efficient service to French Polynesia through the sustainable development of traffic by mobilising its network of over 250 partner airlines.

With the aim of setting an example for the environment and in line with its international commitments, VINCI Airports states that it will implement energy efficiency measures and deploy innovative solutions to enable the airport to achieve Net Zero Emission (scopes 1 and 2).

This new concession, the first for VINCI Airports in a French overseas collectivity, enables the company to extend its network in the Pacific region.

“We are very proud that VINCI Airports has been selected as the successful tenderer for the Tahiti Faa'a concession, a mission that we will carry out alongside French Polynesia,” enthuses Nicolas Notebaert, CEO of VINCI Concessions and president of VINCI Airports.

“We are fully committed to making this airport a gateway that meets the needs and expectations of the region, both in terms of quality of service and environmental ambition, for the sustainable development of French Polynesia's connectivity.”



WOWING THE SENSES

Hong Kong International Airport notes that in July “a set of vibrant multimedia installations were unveiled in Terminal 1, with specially curated contents to create a soothing environment and provide passengers with an enjoyable airport experience”.

As a result, the elevator at the centre of the Meeters and Greeters Hall now houses the captivating 'Crystal Elevator', with its crystalline façade screening digital video and images related to Hong Kong as well as themes of travel, nature and games.

While 'Waterfall Gardens' in the North and South Arrivals Halls synthesise the sights and sounds of nature such as a cascading waterfall, flowing creeks and crystal-clear ponds.

Visitors are encouraged to interact with the vertical and floor screens by touching the waterfall and stepping on the stones of a creek, or simply relaxing by the ponds.



INCHEON TAKES CUSTOMER EXPERIENCE ACCREDITATION TO THE NEXT LEVEL

Incheon International Airport (ICN) has become the first airport in the world to achieve the new Level 5 status in ACI's Airport Customer Experience Accreditation programme.

Incheon dominated ACI World's annual customer service excellence awards in the early years, being named the Best Airport in the World for 12 straight years, which led to it becoming one of the first gateways inducted into the ASQ Hall of Fame.

Incheon International Airport Corporation's president and CEO, Kyung Wook Kim (pictured above with ACI World director general, Luis Felipe de Oliveira), said: "This proves that we have put a lot of effort into bettering the customer experience and shows our focus on exceptional customer service. We will continue providing experiential values to our passengers, going beyond their expectations."

ACI World's de Oliveira said: "Congratulations to the whole airport community at Incheon, who collectively demonstrated remarkable engagement, unity, and enthusiasm in improving customer experience."

ACI Asia-Pacific's director general, Stefano Baronci, noted: "Incheon continues to raise the bar in transforming passenger experiences in the face of the COVID-19 pandemic, and we are extremely proud of this accomplishment. Service excellence has always been a hallmark of Incheon Airport, and I'm confident that it will continue to serve as a role model for the airport industry."

Incheon completed the pilot phase of Level 5 accreditation in July 2022. Through remote and on-site verification, Incheon successfully demonstrated a strong customer-centric culture, uniting the airport community in a human and collaborative approach.

NEW MAN AT THE TOP AT ABU DHABI AIRPORTS

His Excellency, Jamal Salem Al Dhaheri, is the new managing director and CEO of Abu Dhabi Airports, his brief being to "continue the journey of success" achieved by predecessor, Shareef Hashim Al Hashmi.

According to Abu Dhabi Airports, the appointment is in line with the next phase of its development as it continues to transform and become a regional leader in airport management and operations.

Abu Dhabi Airports operates five airports across the Emirate, including Abu Dhabi International Airport (AUH), and it recently announced healthy passenger figures for the first six months of 2022.

It calls the upturn in traffic "a clear demonstration of AUH's substantial network and passenger traffic growth

and commitment to deliver a smooth and seamless passenger experience".

In support of its vision to deliver world-class transport, logistics and free zone services through cutting-edge infrastructure, Al Dhaheri will oversee Abu Dhabi Airports' ambitious air cargo masterplan to upgrade the freight facilities and infrastructure at Abu Dhabi International Airport, to ensure the "enhanced safety and efficiency of all airport and aircraft operations and processes."

The airport operator notes that Abu Dhabi International Airport's next-generation Midfield Terminal will provide the vital extra capacity for passenger traffic and air cargo shipments needed to ensure the airport's future growth.



NEW INVESTOR READY TO TAKE STAKE IN MACTAN-CEBU

The Aboitiz Group is set to take a major shareholding in Mactan-Cebu International Airport in the Philippines after agreeing to pay GMR Megawide Cebu Airport Corp around \$440 million for a 33% stake in the gateway.

GMR Megawide Cebu Airport Corp – the developer and operator of Mactan Cebu International Airport on the central island of Cebu – is owned by Philippine builder Megawide Construction and its Indian partner GMR Airports International.

The Aboitiz Group will also acquire exchangeable notes worth \$273 million, which will be converted into shares in late 2024 allowing it to take full control of the airport, which serves as the gateway to popular tourist destinations and

as an air hub for businesses located in the Mactan Export Processing Zone and elsewhere across the region.

“We at Aboitiz InfraCapital are happy to partner with GMR-Megawide for the continued growth and development of the Mactan-Cebu International Airport,” said Aboitiz InfraCapital’s president and CEO, Cosette Canilao.

“The GMR-Megawide Consortium has done a tremendous job by significantly expanding the airport over the pre-pandemic years – almost tripling passenger traffic in five years.”

The deal is subject to customary closing conditions including the necessary third party and regulatory approvals.



NEW REPORT OUTLINES CHANGI’S SUSTAINABILITY VISION

Changi Airport Group (CAG) has released its latest sustainability report, ‘Forging A Sustainable Changi’, which outlines its sustainability vision, approach and outcomes from the financial year ending 31 March 2022.

The report covers CAG’s activities across Changi Airport’s four passenger terminal buildings, the Changi Airfreight Centre and the aircraft operating areas on the airport site, to build a sustainable Changi Airport with airport partners and the community.

Committing to cutting carbon emissions while improving resource efficiency, it has pledged to cap absolute carbon emissions at 2018 levels until 2030, even with the growing number of passengers that Changi Airport is expected to serve in the years ahead.

It notes that it strives towards a Net Zero aspiration by 2050 through the use of new technologies and the increased adoption of renewable energy.

The airport operator has also embarked on a detailed assessment of the impacts of evolving climate factors, such as rising ambient temperatures and greater rainfall intensity.

Climate risks are mapped up to 2050 for airport-wide adaptation and solutions are being developed to address them. For instance, in response to increased rainfall, CAG has expanded Changi’s drainage network and installed sensors linked to a real-time data dashboard for better flood risk management.

Apart from improving chiller condensate and wastewater recycling capabilities, CAG continues to save water and has reduced the airport’s overall water consumption by 5.9%. The airport has, for example, reduced the use of potable and non-potable water, ranging from toilets and building cooling systems to irrigation and cleaning.

And CAG claims to have optimised waste management by reducing waste at source, encouraging good recycling practices and implementing new and more effective waste collection systems.



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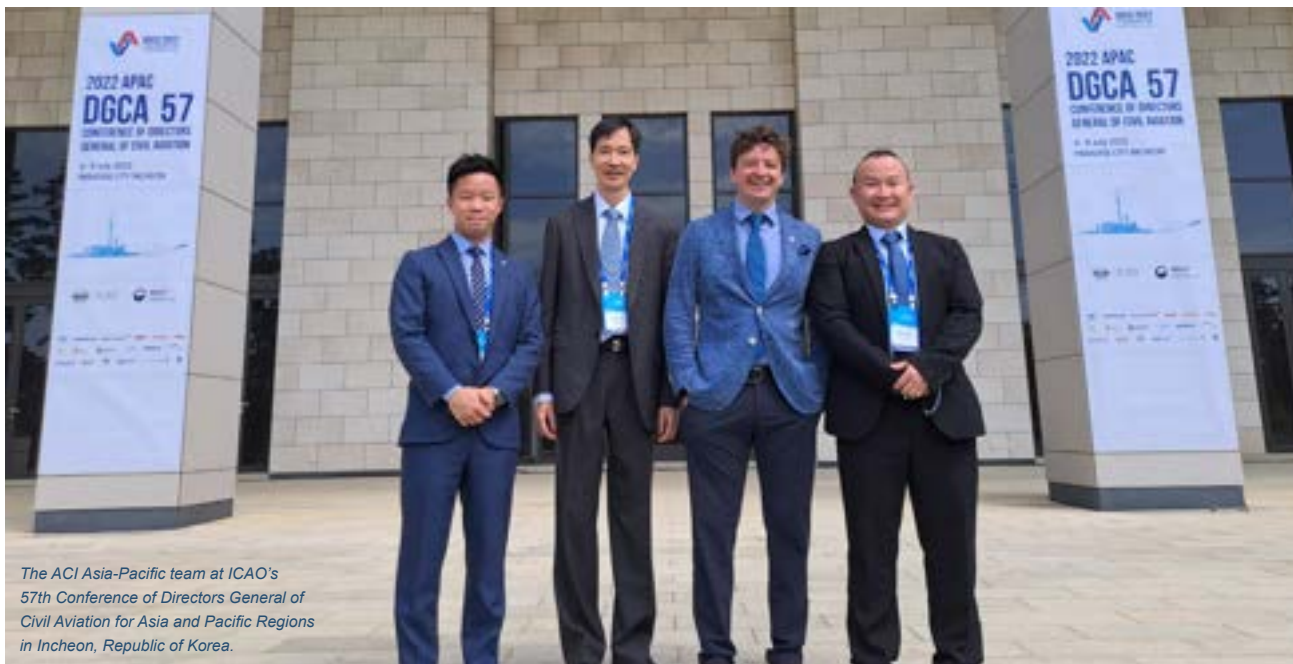
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REGIONAL UPDATE

From making recommendations at the ICAO DGCA Conference and meeting regulators in India to engaging with the Japanese government, ACI Asia-Pacific has been busy engaging with stakeholders and policymakers across the region.



The ACI Asia-Pacific team at ICAO's 57th Conference of Directors General of Civil Aviation for Asia and Pacific Regions in Incheon, Republic of Korea.

MAKING AN IMPRESSION AT ICAO DGCA CONFERENCE

Participating at the ICAO DGCA Conference in Incheon, Republic of Korea, ACI Asia-Pacific made a strong impression, making several recommendations related to the decarbonisation of airports; the need for a responsive and flexible regulatory framework; the adoption of One-Stop Security; addressing the manpower crisis at airports; and aviation's smooth operational recovery from the pandemic, among others.

We are pleased that ICAO Member States have, to a large extent, favourably considered our recommendations,

which are designed to further enhance the role of airports as engines of economic and social progress in a safe and sustainable manner.

The road to recovery in Asia-Pacific is still long and challenging, but States have unequivocally committed to strengthen regional co-operation, including in the areas of reviving air travel, enhancing manpower, improving operations to ensure a smooth traveller experience, aviation safety and sustainability.



SPEAKING AT ICAO HIGH-LEVEL PANEL

At the DGCA Conference, our director general, Stefano Baronci, had the privilege to participate in a high-level panel that addressed the theme of 'Strengthening Regional Cooperation for the Restoration of Air Network with No Country Left Behind'.

ADVOCACY WITH GOVERNMENTS

As an important voice of the aviation industry, we have been continuously working to facilitate the smooth recovery of the industry.

Our dialogue with national authorities has finally paid off. ACI Asia-Pacific and its 617 airports welcome the decisions by the Government of Japan and the Government of Hong Kong for taking significant steps in relaxing COVID-related restrictions on international travel.

We engaged with the Government of Japan, urging them to take necessary actions to bolster the recovery of the industry. ACI Asia-Pacific wrote a letter, co-signed by ACI World and World Travel & Tourism Council (WTTC), addressed to the Prime Minister of Japan urging the government to remove all restrictions and restore travel privileges to enable the smooth recovery of the industry in the region.



SHARING INSIGHTS AT CIAT 2022

On the side lines of the 57th ICAO, DGCA Conference, our director general, Stefano Baronci, participated at the CIAT 2022 on 'Air Transport - Restarting Global Aviation'.

Speaking on the topic 'Never Let a Good Crisis Go to Waste - The Airports' Perspective', he talked about how the industry can better equip itself during a crisis.

ACI ASIA-PACIFIC RELEASES TENDERING GUIDELINES FOR CLIMATE RESILIENCE PLANNING

ACI Asia-Pacific has released the Tendering Guidelines for Climate Resilience Planning to build on airport operators' understanding of the climate risk assessment. It is designed to help identify an airport's sensitivity to adverse impacts and adaptive capacity to climate hazards.

The assessment can be used for the development and possible adoption of actions to improve resilience and manage the impacts of a changing climate at an airport. This guideline provides sample contract clauses which can be used in the tendering process to commission a climate resilience study.

Airports bear a significant risk from a changing climate which are likely to become more severe and dangerous in the future. The negative impacts caused by climate change are disruptive and have serious potential consequences for airport safety, asset management and operational resilience.

Conducting a climate risk assessment could be highly technical and resource-intensive, and it is likely that airport operators may require collaboration with external experts or consultants to perform the task unless the airport is well-resourced with sufficient in-house technical expertise and capacity.

While the focus of the guidelines is to provide tendering guidance to support airports to commission their own climate risk assessment for climate resilience planning, further information has been provided in each section to educate airport sustainability managers on the climate risk assessment process. This will help airport sustainability managers to become more informed as they commence the process.

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STRENGTHENING CO-OPERATION WITH SOUTH KOREA'S AIRPORTS

As part of our efforts to enhance regional co-operation, during his time in South Korea, Stefano Baronci took the time to meet with Kyung Wook Kim, president and CEO of Incheon International Airport Corporation (above left), and Hyung Jung Yoon, president and CEO of Korea Airports Corporation (above right).

During their time together, the airport leaders were able to exchange their views on a number of issues as well as explore potential opportunities to strengthen their ties in the future.

Incheon International Airport has already agreed to kindly host next year's ACI Global Customer Experience Global Summit.



Stefano Baronci (Left) with Rajiv Bansal, Secretary-Civil Aviation, Government of India.



Stefano Baronci (Right) with Arun Kumar, Director General of Directorate General of Civil Aviation, Government of India.

ACI ASIA-PACIFIC MEETS AVIATION REGULATORS IN INDIA

ACI Asia-Pacific recently had the opportunity to meet key aviation regulators in India to discuss several aspects of the aviation industry in India.

region's focus on sustainability and quality standards. ACI Asia-Pacific also provided AERA (pictured below) with the global practices on airport charges.

We also discussed about how ACI Asia-Pacific can continue to collaborate with Government of India to create a conducive environment for aviation industry.



Also in India, Stefano Baronci met with AERA officials in New Delhi on June 23, 2022, to discuss various economic aspects of aviation. ACI Asia-Pacific provided AERA with a snapshot of the industry's recovery, challenges, and the



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CHINA AIRPORT SERVICES CONFERENCE

ACI Asia-Pacific director general, Stefano Baronci, had the honour to virtually participate in the 7th China Airport Services Conference on ‘Boosting the industry’s confidence starting from the trends in the global aviation market in the post-epidemic era’.

He took the opportunity to speak about the state of the aviation industry and how airports have reinvented themselves post-pandemic by adopting innovative

technologies to continuously provide superior passenger experience. He said: “Having learnt enormously from science on how to handle a risk like COVID, it is essential for States to fully reopen their borders, and lift or ease travel restrictions.

“Our industry is based on connecting people. Our industry believes in shaping a new economy, based not just on profits but on wellbeing of the communities that it serves.”

NEED FOR DIGITAL INNOVATIONS



Speaking on the MAVCOM panel ‘Defining the Future of Travel: Elevating Travel Experiences Vis-à-Vis Accelerated Pace of Digitalisation’ in Malaysia, Stefano Baronci deliberated the challenges faced by the aviation industry during COVID-19, and the need for digital innovations to enhance passenger experiences.

He is pictured (immediate left) at the event, where the panel was moderated by the ACI World Governing Board’s Asia-Pacific regional advisor, Tan Sri Bashir Ahmad (far left).



TECHNOLOGY TO ACCELERATE TOURISM

Stefano Baronci spoke at the World Tourism Organization (UNWTO) Ministerial Roundtable on Tourism Resilience through Innovation and Digitalisation in Asia and the Pacific, on the occasion of the 34th Joint Meeting of the UNWTO Commission for East Asia and the Pacific.

At the Roundtable, held in the Maldives, he shared his views on how to use technology to accelerate the recovery of tourism in Asia.

ASIA-PACIFIC SET TO LOSE LARGEST AIR MARKET STATUS

China’s tougher border measures and Japan’s cautious approach towards the relaxation of inbound travel restrictions could displace Asia-Pacific as the world’s largest air passenger market in 2022.

Asia-Pacific, which has dominated the civil aviation market for several years prior to the pandemic, is estimated to finish second, behind Europe in terms of passenger share, and at a comparable level with North America.

The latest ACI Asia-Pacific forecast indicates that by the end of 2022, passenger traffic will only recover by about 55% as compared to pre-pandemic levels. This is in stark contrast to Europe and North America where the recovery is substantially higher, and indeed estimated to be between 70% and 80%, respectively.

In 2019, 3.38 billion passengers travelled by air in Asia-Pacific, representing 37% of the global volume of 9.16 billion.



ADVOCACY IN AVIATION SUSTAINABILITY

Organised by South Korea's Ministry of Land, Infrastructure and Transport, Korea Airports Corporation and Incheon International Airport Corporation, the recently held 2022 International Forum for Airport Innovation invited industry stakeholders to share insights about aircraft noise management.

Ken Lau, ACI Asia-Pacific's senior manager for the environment and airport information technology, represented the association at the event (pictured above) and spoke about Environmental, Social and Governance (ESG) best practices in relation to the sustainable development of airports and aircraft noise management.

YOUNG EXECUTIVE AWARD 2023 IS NOW OPEN FOR ENTRIES

Introduced in 2009, the Young Executive Award is an annual research paper competition which honours the young airport executives who demonstrate strong passion for the aviation industry and propose innovative ideas to address the most pressing issues that the industry is facing today.

The winner will receive a cash award of \$1,000 and a scholarship for the Airport Operations Diploma Programme (online self-study).

ACI ASIA-PACIFIC LAUNCHES SECURITY GUIDANCE DOCUMENT

ACI Asia-Pacific has released a Security Guidance Document to help airports strengthen security in order ensure adequate protection to passengers.

Airport security personnel are normally required to perform multiple tasks, including screening, access control, vehicle examination, patrolling, behaviour detection and more.

Airports are therefore required to ensure their security workforce is competent enough to perform the tasks.

However, the requirements of some of these functions are, in many cases, not clearly stipulated in the respective

In another green initiative, ACI Asia-Pacific Regional Environment Committee members and environmental sustainability experts joined forces to share insights at a webinar on Green Airport Building and its Benefits to Decarbonisation.

The webinar was designed to promote environmental best practices to airports across the region as ACI Asia-Pacific, airports stakeholders and our industry partners strive to find new ways of minimising aviation's impact on the environment as well as providing insight on how to build the resilient and sustainable airports of tomorrow.

As an incentive for nominating a candidate, we are offering the airport of the winning candidate an additional scholarship to any one ACI Global Training Leadership and Management Professional Certificate Course, virtual or classroom (excluding travel fees).

The deadline for entries is on or before noon Hong Kong time on Friday, December 16, 2022.

national regulations, therefore causing differences in expectation and interpretation from country to country.

The ACI Asia-Pacific Regional Aviation Security Committee (RASC) has developed this guidance document to consolidate competency and training requirements of airport security functions. Given the different circumstances across the region, this document may not be universally applicable, but rather it aims to provide supplementary references for airports in understanding the requirements of the various job functions, and thus being able to make better decisions on recruitment and human resources deployment.



LOOKING TO THE FUTURE

The Middle East, sustainability and traffic recovery are among the main focuses of ACI Asia-Pacific's new president, Emmanuel Menanteau, writes Sunil Subbaiah.

Newly appointed ACI Asia-Pacific president, Emmanuel Menanteau, is a well known face in the region, having gained substantial experience working across Asia over the last two decades.

Indeed, his assignments to date have included positions in India, Japan, China, Singapore and Cambodia in the fields of aviation, defence and aerospace.

Menanteau, who represents Cambodia Airports as board director, was elected president of ACI Asia-Pacific in June this year. He will initially serve a two-year term and, arguably, leads the association – ACI Asia-Pacific is the largest region with 617 airports spread over 46 countries – during one of its most challenging times as the industry begins its recovery from the COVID-19 pandemic.

In this interview, Menanteau outlines his plans and priorities for the association; tells us more about the ongoing efforts to stimulate the recovery of air traffic that has nosedived since the beginning of the pandemic; and provides his views on the industry's focus towards sustainability.

AS PRESIDENT OF ACI ASIA-PACIFIC, WHAT ARE YOUR IMMEDIATE PRIORITIES?

First of all, I wish to say that I am profoundly honoured to be appointed president of ACI Asia-Pacific for the next two years and lead the region's airports as we shape the future of the aviation industry globally. Our top priorities are to strengthen our focus on the Middle East region, speed up the sustainable transition of airports, and support the recovery of air traffic in the Asia-Pacific and Middle East region.

– FOCUS ON THE MIDDLE EAST

The Middle East is a vast region, and its aviation industry is one of the fastest growing in the world. It is strategically important for the recovery of aviation industry as well as the global economy due to its geographical location in the globe, with short flying time to most part of the world.

We count a total of 19 airport operators are members, between them operating 108 airports across the region. We also have an ever growing number of World Business Partners in the Middle East.

To cater to this large base of members from the Middle East, ACI Asia-Pacific needs to provide special attention



to the region in order to strengthen our advocacy efforts and work towards excellence of standards. To achieve this, we are in the process of opening a sub-regional office in the Middle East.

The office will allow ACI Asia-Pacific to customise its programmes to serve members in the region more efficiently. It will also provide an opportunity to create an awareness around ACI Asia-Pacific and its activities, improve advocacy and representation in key local aviation events.

– SUSTAINABILITY

Aviation is in the spotlight for its impact on the environment, and so we need to work very hard on this issue. Given the recent Intergovernmental Panel on Climate Change’s (IPCC) call for a net-zero economy by 2050, the aviation industry, at large, must develop more ambitious CO2 reduction goals to meet the objectives of the Paris Agreement.

Airports in our region are taking concrete steps towards net zero CO2 emissions, with plans to further accelerate commitments. We have over 64 major airports actively participating in the ACI Airport Carbon Accreditation programme. We have two airports in the Level 4+ category, four at Level 4, five at Level 3+, and 26 at Level 3. The two airports in the highest level (4+) are Delhi’s Indira Gandhi International Airport and Jordan’s Queen Alia International Airport.

Taking it to the next level, our airport members unanimously passed a resolution at our Regional Assembly to voluntarily commit to net zero carbon emissions and develop action plans to meet this commitment. This

effectively means being proactive in reducing emissions by using low carbon technologies in airport operations and infrastructure management, and urging governments to decarbonise their respective electricity grids and facilitate the transition to renewable energy at airports.

Airports are also embracing technology and innovation in the aviation market through collaboration to tackle decarbonisation challenges in aviation’s wider ecosystem.

Indeed, many airports in the Asia-Pacific and Middle East regions are already working towards exploring potential pathways. Airbus and Kansai Airports, for example, have signed an MoU to explore the use of hydrogen at three of the group’s airports in Japan (Kansai International Airport, Osaka International Airport, and Kobe Airport). Through this partnership, Airbus and Kansai Airports will jointly prepare a roadmap to address the challenges and define an advocacy plan for hydrogen needs.

Elsewhere, Brisbane Airport in Australia has signed the ambition statement of the World Economic Forum’s Clean Skies for Tomorrow 2030 Coalition, agreeing to accelerate the supply and use of sustainable aviation fuel (SAF) to 10% by 2030. In India, airport operators Groupe ADP and GMR Airports – together with Airbus, Axens and Safran – have signed an MoU to conduct a joint study on SAF and their potential in India. And in Singapore, Changi Airport Group (CAG) has announced that it is to conduct a feasibility study for establishing a hydrogen hub at Changi Airport.

Pioneering efforts such as these underline the commitment of our members to contribute towards the global cause.



As we move forward, we must explore innovative solutions to address environmental issues, and strengthen our co-operation with all aviation stakeholders to mitigate climate change.

– SUPPORTING THE RECOVERY OF AIR TRAFFIC AND CONNECTIVITY

Air transport mobility is a key tool for economic growth – it helps generate trade, promote tourism, and create employment. It is therefore no exaggeration to say that the recovery of this industry is crucial for the global economy.

However, while other regions of the world are experiencing traffic closer to 2019’s level, Asia-Pacific in particular is still far behind for international traffic. Prolonged travel restrictions, geopolitical conflict, and the subsequent impacts on macro-economic factors, have proved to be detrimental to the overall growth of aviation.

The COVID-19 pandemic, although somewhat easing in Q2 2022, some States in Asia-Pacific have been late to withdraw restrictions, affecting the recovery of the industry.

To enable the smooth recovery of aviation, ACI Asia-Pacific had earlier this year commissioned an independent study on travel restrictions.

The study, based on modelling different scenarios of COVID-19 variants of concern with similar or higher level of infectiousness than the current Omicron, revealed that travel restrictions such as quarantine and testing is ineffective in mitigating the spread of COVID-19.

In the last few months, many Asian countries have abolished travel restrictions on both business and leisure travel, following the practice already applied by other regions in the world. An increasing number of countries such as Cambodia, Singapore, India, Thailand, Malaysia and Australia have also ended restrictions on international air travel without negatively impacting the health care system at national level.

Preliminary statistics from Phnom Penh, Singapore, New Delhi, Bangkok (Suvarnabhumi), Kuala Lumpur and Brisbane show that, in aggregate, passenger traffic has increased substantially.





AS PART OF ITS ADVOCACY EFFORTS, HOW DO YOU THINK ACI ASIA-PACIFIC CAN SUPPORT THE RECOVERY OF AIR TRAFFIC?

At ACI Asia-Pacific, our mission is to advocate for policies and provide services that strengthen our members' ability to serve their passengers, staff and stakeholders in a more efficient manner. We aim to advance the collective interests of airports in Asia-Pacific and the Middle East and promote professional excellence in airport management and operations.

The COVID-19 pandemic has adversely impacted aviation. After phenomenal growth in air travel over the last decade, the crisis has left airports bleeding. According to our forecast, Asia-Pacific is expected to have the slowest recovery in terms of passenger volumes, reaching only 55% of 2019 levels in 2022. This follows an already very challenging 2021 that ended at 43.5% of 2019's levels. Full year recovery to 2019 levels is expected by the end of 2024. In terms of revenues, Asia-Pacific airports are expected to lose a massive \$41 billion in revenue in 2021 and 2022.

We therefore continue to cater to our members' needs, providing valuable and relevant data and guidance to help airports survive and recover from the global crisis.

One of the first things ACI initiated during the pandemic was the launch of the Airport Health Accreditation programme that enabled airports to demonstrate to passengers, staff, regulators, and governments that they were prioritising health and safety in a measurable, established manner while also validating their own measures and processes. This was a vital first step towards rebuilding passenger confidence in air travel.

From a big picture perspective, there are a plethora of problems hampering the sustainable recovery of our industry. They currently include revenue shortfalls impacting on infrastructure expansion programmes, regulatory framework and manpower constraints.

Indeed, there is no disputing that the COVID-19 pandemic has led to a rapid deterioration in the financial health of the airport industry. As a result, the industry has witnessed a significant manpower crunch. Aviation jobs are no longer competitive for job seekers, while the sector as a whole is facing competition from several other industries in a tight labour market.

To address this critical challenge, ACI Asia-Pacific has called on governments to work closely with industry stakeholders to identify solutions aimed at alleviating workforce shortages at airports in the short and medium-term, as well as to develop a roadmap to make airport employment more attractive and competitive in the long-term.

The competitive and economic landscape of the airport industry and the aviation ecosystem has changed dramatically over the last three decades. The airport business therefore requires flexible policy measures capable of restoring the equilibrium and stimulating a sustainable recovery from the pandemic as well as ensuring that longer-term targets of sustainability, infrastructure development and service quality are duly met.

Keeping this as a base, we are pressing for an extensive review of ICAO's Policies on Airport Charges (Doc 9082). The last review was done in 2008, and so much has changed since then.



THERE IS A STRONG FOCUS ON DECARBONISING AIRPORT OPERATIONS. DO YOU THINK THE AVIATION INDUSTRY WILL BE ABLE TO ACHIEVE NET ZERO CARBON EMISSIONS BY 2050?

Aviation plays an important role in the global economy. It connects people and places, expands horizons and creates opportunities, it is therefore important for our industry to grow responsibly and play its part in a net-zero future. And the time for us to act is now.

Since 2019, many more forward-looking countries and airports have voluntarily pledged Net-Zero Carbon Emissions by 2050 in response to climate change challenges. In addition to our global programme Airports Carbon Accreditation, we have launched Green Airport Recognition 2022 with an objective to accentuate the importance in best practices sharing among airports along the decarbonisation journey, specifically in Scope 1 and Scope 2 carbon emission reduction.

Airports should assess, minimise and mitigate greenhouse gas emissions under their direct control, while guiding and influencing other aviation stakeholders at the airport. Ultimately, an airport operator should try to achieve zero emissions, or net or carbon neutrality as interim to zero emissions.

According to ACI World’s *Long Term Carbon Goal Study for Airports Report, 2021*, the global goal of net zero carbon emissions by 2050 for airports is feasible. The new net zero carbon landscape, which shifts the reliance on offsetting to renewable energy, demonstrates a leap forward in emission cut.

Energy transition from fossil fuel-based sources to renewable energy sources is the key for the airport industry to achieve the unified goal. We are already witnessing a massive shift in this direction

with many airports in the region adopting renewable mechanisms. Common practices include renewable energy power purchase agreements; in-house solar power generation and zero-emission vehicle programmes.

For airports in Asia-Pacific and the Middle East, due to the expected air passenger traffic growth and the shortfall in the projected abundance of renewable energy, more efforts are needed for the region to achieve this target. These efforts include close collaboration and partnership with governments and industry and carbon removal using negative emissions technologies.

Over the course of the last decade, ACI Asia-Pacific airport members have proactively undertaken significant actions to reduce emissions from their operations. These include voluntarily participating in the Airport Carbon Accreditation programme, the global industry carbon emission reduction standard for airports. As of March 2022, 64 out of the world’s 393 accredited airports are from Asia-Pacific and the Middle East regions, which collectively handle 41.2% of the region’s air passenger traffic.

Worthy of note is the fact that seven airports in the region have already reached carbon neutrality status while six airports have achieved level 4 or above. This means they have been accredited for having absolute long-term emissions reduction targets, aligned with the Paris Agreement (IPCC scenarios) of net zero carbon emission.

ACI Asia-Pacific has been doing what it does best in raising awareness, advocacy, best practices sharing and capacity building by providing periodic webinars on the topics such as Airports’ Long Term Carbon Goals and renewable energy at airports.



According to the ACI Asia-Pacific Environmental Survey 2021, reducing energy consumption, using low global warming potential refrigerants and onsite solar energy generation are the top three GHG/carbon reduction measures implemented by airports.

There is an increasing trend of airports installing onsite solar energy (28 airports in 2021) and purchasing renewable energy (eight airports in 2021) over the last five years. We encourage airports to follow these best practices.

WHAT ARE THE AVIATION TRENDS THAT ONE CAN EXPECT OVER THE NEXT FEW YEARS?

We have witnessed the rapid transformation of airports since the onset of the COVID-19 pandemic, and I think we can expect a lot more in the coming years as airports are determined to continuously improve the passenger experience and introduce innovative solutions.

Technology, particularly contactless and facial biometrics are going to drive digital transformation at airports. We can also expect to see increased robotics guiding passengers through the airports and autonomous vehicles plying within the airports. In addition, innovative concepts on sustainability are expected as airports are strongly committed to investing in technology that will help them reduce their carbon footprint and ensure a more sustainable future.

We are witnessing some momentum around hydrogen, notably with initiatives to accelerate the development of a more sustainable aviation. Several airports in the region are making significant investment to this effect.

They include Incheon International Airport, which has signed a MoU with Air Liquide, Airbus, and Korean Air to explore the use of hydrogen at the gateway. The collaboration will also study the development of the South

Korean airport's infrastructure to support the deployment of hydrogen-powered commercial aircraft.

While at Changi Airport, CAG has signed a co-operation agreement with global industrial gases and engineering company, Linde, and the Civil Aviation Authority of Singapore to study the potential for a future hydrogen hub in the city state.

The use of hydrogen, preferably green hydrogen, is just one of many potential solutions being considered by Asia-Pacific's airports today as they, and the air transport industry, strives for a better, greener, decarbonised future.

WHAT NEEDS TO HAPPEN TO MAKE SUSTAINABLE AVIATION FUELS COMMONPLACE?

Even as wind and solar power have become commonplace in recent years, Sustainable Aviation Fuel (SAF), too, is on the verge of becoming a possibility. The aviation industry has made a commitment to achieve net zero carbon by 2050. A transition to net zero flying is possible and sustainable aviation fuels are certainly the key for the aviation ecosystem to achieve its decarbonisation goals.

Aviation used some 300 million tonnes of conventional aviation fuel (CAF) in 2019, generating over 900 million tonnes of CO₂ as tailpipe emissions, and close to 18 million tonnes of CO₂ through the manufacture and transportation of that fuel.

Assuming the industry returns to its pre-COVID-19 growth trend, if no measures are taken, annual aviation fuel consumption will more than double between now and 2050. To drive a sustainable, long-term recovery in the aviation industry, facilitating the transition to SAF remains a priority across aviation's value chain.



BETTER TIMES ARE COMING

The relaxation of travel restrictions and successful COVID vaccination programmes in many parts of Asia-Pacific and the Middle East has led to a cautious sense of optimism for the aviation sector.

It feels like the post pandemic recovery of airports in Asia-Pacific and Middle East is finally beginning to gather some pace, with passenger traffic, airline route networks and global connectivity bouncing back strongly in the second quarter of 2022.

Indeed, ACI Asia-Pacific’s Industry Outlook report for the quarter ending June 30, reveals that following a turbulent first quarter, marked with rigid travel restrictions, suspension of international air travel in some parts of the region and geopolitical conflict, the Asia-Pacific and Middle East regions were beginning to benefit from strong pent-up demand.

However, the report – developed in partnership with Mott MacDonald – notes that despite signs of improvement, the industry still faces strong headwinds, including geopolitical instability in eastern Europe and its subsequent impact on the global macro-economics, including high inflation, rising energy prices and disruptions in supply chains.

It states that all these external factors, to a certain extent, continue to negatively impact the supply and demand for air travel.

ACI Asia-Pacific’s director general, Stefano Baronci, says: “As a result of a successful vaccination campaign that covers an average of 74% of the population across the region, travel restrictions are being gradually phased out across the region, fuelling strong demand for air travel.

“Though 2022 looks to be a more positive year for the sector, there will be bumps in our road to recovery especially in consideration of the uncertain macro-economics scenario.

“At the recent ICAO 57th Conference of Directors General of Civil Aviation for Asia and Pacific Regions in Incheon, Republic of Korea, we urged the regulators to work closely with the industry to enhance manpower and operations to ensure a smooth traveller experience and harmonise as much as possible health protocols.

“ACI Asia-Pacific will continue to work with our members to help the industry build back stronger.”

POSITIVE INDICATORS

On a positive note, several other indicators look promising for the sector that has been battered by the



COVID-19 pandemic over the last two years. Easing of stringent travel protocols is driving the recovery of traffic.

The quarter saw countries such as Cambodia, Singapore, India, Thailand, Malaysia and Australia withdrawing restrictions on international air travel. Statistics from key hubs in these countries show that, in aggregate, passenger traffic has increased substantially between the end of February and early July 2022.

While South Asia (Bangladesh, Bhutan, India, Nepal, Pakistan, Sri Lanka, Maldives and Afghanistan) and the Middle East (Bahrain, Kuwait, Oman, Saudi Arabia, UAE, Iraq, Iran, Jordan, Yemen, Qatar) have recovered to approximately 85% of Q2 2019 seat capacity.

Emerging East Asia (China, Mongolia and Democratic People's Republic of Korea) is at just 15% of 2019 Q2 level as China adopted a 'Zero-COVID' approach and renewed lockdowns. Most of East Asian countries are heavily dependent on Chinese passengers.

Pent-up demand for air travel particularly for leisure such as visiting friends and relatives and postponed holidays, says ACI Asia-Pacific, will continue to buoy the industry's recovery even as the sector faces strong headwinds against inflation and geopolitical risks.

In fact it notes that many airports are already operating at capacity in peak periods, even though the overall footfall is below 2019 levels.

The Q2 2022 scheduled domestic seat capacity shows recovery of 89% of pre-pandemic levels as compared to the same quarter of 2019. The international seat capacity, however, was still down 59% as travel restrictions, quarantine and testing requirements continued to have an impact, particularly in China and partially in Japan.

Total domestic seat capacity is expected to exceed 2019 levels by Q3 2022, with the overall traffic for the 2022 likely to be on par with 2019 levels.

AIRPORT REVENUES AND EXPENDITURES

Despite an improving trend, ACI Asia-Pacific warns airport financial margins continue to remain far below pre-pandemic levels and are economically unsustainable.

Quarterly revenues remain 60% below 2019, which is a similar level compared to 2021, indicating that revenues continue to remain at unsustainably low levels, leading to large operating losses incurred by airports.

Total operating expenditures have declined in Q1 2022 compared to 2019 and while this decline has narrowed slightly compared to Q1 2021. This demonstrates that airport operators are making efforts to limit expenditures.

AIRPORT WORKFORCES

Airports in the Middle East and Asia-Pacific are carefully handling the risk of deficit of workforce at airports, says ACI, noting that compared to Europe and other parts of the world, airports in Asia-Pacific and the Middle East haven't generally experienced the manpower shortages experienced in the rest of the world.

This, it says, is mainly due to two concurrent factors: the long-term vision of several airports to retain their staff despite the challenging times; and the moderate recovery of traffic compared to other regions in the world.

Indeed, the ACI Asia-Pacific region is expected to have the slowest recovery, reaching only 62% of 2019 levels in 2022.

"This is giving our airports and other aviation stakeholders time to address the challenges and simultaneously work on introducing digital technologies and re-skilling and up-skilling staff, providing a better career development to make airports a more attractive place for long-term career," says ACI Asia-Pacific.



BALANCING THE RISKS IN UNCERTAIN TIMES

ACI World has published its tenth quarterly assessment analysing the impact of the COVID-19 pandemic, its effects on airports, and the path to recovery.

More than two years since the World Health Organization (WHO) declared the COVID-19 outbreak a global pandemic, a certain “normality” has started to emerge thanks to a historic vaccination effort which saw, at the time of publishing, more than 12 billion doses being administered across 184 countries.

This unprecedented vaccination effort is now starting to bear fruits despite some setbacks from the recent Omicron wave. Many countries have followed through on their plans to return to some normality, lifting many health measures, relaxing travel restrictions, and re-opening borders.

The momentum created by the re-opening had a positive and immediate impact on global air travel demand recovery. Indeed, the summer months of 2022 were expected to be exceptionally strong, many pointing out that it could effectively turn out to be “three summers merged into one.”

As more pandemic restrictions were removed, facilitating the trade in goods, and enabling the manufacturing and

services sectors to grow, the performance of the global economy has accelerated, especially since the last few months of 2021.

The International Monetary Fund (IMF) estimated the global growth of the economy in 2021 to 6.1%. It is, however, expected that the growth will slow down significantly in 2022 and 2023 as the recovery faces multiple headwinds, ranging from new potential variants, high crude oil prices, higher inflation, supply disruptions, or geopolitical conflict and the resulting humanitarian crisis.

According to the IMF, global growth is expected to moderate to 3.6% in 2022 and 2023, a 0.8 and 0.2 percentage point decrease from its January forecast. High inflation levels are contributing significantly to this global slowdown. Energy and food prices have increased rapidly, disproportionately impacting low-income countries.

In its April 2022 Economic Outlook, the IMF stressed that “multilateral efforts to respond to the humanitarian crisis,



prevent further economic fragmentation, maintain global liquidity, manage debt distress, tackle climate change, and end the pandemic are essential.”

On the vaccine front, the pace of vaccination has continued to accelerate in core emerging markets in the past few months, but many countries continue to fall well short of the commonly recognised threshold for herd immunity.

Only 18% of the population in low-income countries has received at least one dose of a vaccine while 81% of the high and upper-middle-income countries’ population has received at least one dose. Targeting countries with a low vaccination rate is especially important to prevent the risk of new waves and the formation of new variants.

In this overall context, the quarterly assessment seeks to highlight some key figures in terms of the impacts of the pandemic on airport traffic, and explore pathways to recovery.

1. AIRPORT TRAFFIC RECOVERY

The recent momentum created by the lifting of many health measures and the relaxation of most travel restrictions in many European countries and in the Americas has renewed industry optimism. It however exposed even more the uneven recovery as major aviation markets in Asia-Pacific lag behind their Western counterparts as they continue to be in part closed to international traffic.

Air travel should see an uptick in the second half of 2022, moving the industry closer to its recovery. While many indicators are pointing towards the recovery, the industry is also facing some noteworthy headwinds.

UPSIDE RISKS

• **PENT-UP DEMAND:** There are clear signs of a surge in air travel demand resulting from a combination of accumulated savings by consumers during the pandemic, vacation deprivation felt by many leisure travellers and the desire to reconnect with families, friends and/or colleagues. Many industry analysts refer to it as “revenge travel,” as passengers rush to take to the skies after being homebound for the last two years.

• **VACCINATION RATE AND RELAXATION OF TRAVEL RESTRICTIONS:** The acceleration of the easing of travel restrictions, a major hurdle to air transport and in particular international travel, is likely to increase the demand for air travel. Many countries in all regions have put in place plans to lift many, if not all health measures, relax travel restrictions, and re-open borders as a step to return to some normality. Many of the world’s major aviation markets with originating passenger traffic have reached vaccination rates in excess of 70%. In many cases, vaccines serve as the passport to travel in the current context.

DOWNSIDE RISKS

• **GEOPOLITICAL CONFLICTS:** The war between Russia and Ukraine contributed to further damage the economy, adding to the global slowdown in 2022. It not only triggered a rise in energy prices affecting the cost of travel, but a humanitarian crisis resulting in millions of refugees and a global food crisis. There are risks of worldwide spill overs to other commodity markets adding to the inflation push.

• **ECONOMIC DOWNTURN:** The risk for an economic downturn due to rising interest rates aimed at curbing inflation is ever-present. This coupled with the significant



increase in jet fuel prices could weaken and even delay the aviation industry recovery in the short-term by increasing the cost of travel. The IMF expects inflation to remain in 2022, projected to reach 5.7% in advanced economies and 8.7% in emerging markets and developing economies.

• SUPPLY CHAIN DISRUPTIONS AND LABOUR

SHORTAGE: Supply chain disruption affecting a large range of commodities and services triggered a rapid rise in the price of oil and gas – including jet fuel – as well as a broader transportation crisis. The shortage of shipping containers, clogged seaports, and cross-border shipment disruptions have a direct impact on the health of the global economy.

The rapid growth in demand following the relaxation of travel restrictions has resulted in an unprecedented labour shortage for airports, airlines, and other service providers.

These shortages have been exacerbated by the pandemic-induced layoffs across the whole aviation ecosystem. Re-hiring has proven to be particularly difficult for the industry as many aviation workers have moved on to careers in other sectors.

• POTENTIAL NEW OUTBREAK: As we saw with the Omicron wave, a less virulent but highly contagious variant can still have a significant impact on the aviation industry.

However, the propensity for such disruptions diminishes as populations become fully vaccinated and as governments are learning how to manage such outbreaks. The lessons learned from the management of COVID-19 will also help governments and the industry better manage future health events.

In this context, using the latest data from ACI World’s monthly traffic data collections in 2022, new global and regional estimates of the impact of the crisis on passenger traffic are presented.

WORLD

- For the full year 2021, the COVID-19 outbreak removed 4.6 billion passengers compared to 2019, representing a loss of 50.3% of global passenger traffic. Over the first two years of the pandemic, the COVID-19 outbreak reduced the number of passengers at the world’s airports by 10.2 billion.
- Global passenger traffic is expected to improve significantly in 2022 to reach 77% of what it was in 2019, with traffic for 2022 totalling 7.1 billion.
- Full recovery to 2019 levels at the global level is forecast for 2024.

ASIA-PACIFIC

- The early momentum of the Asia-Pacific region was severely dampened in the second half of 2021 by a resurgence of COVID-19 and the re-establishment of travel restrictions in the region. The region ended the year 2021 at only 43.5% of its 2019 level.
- While some countries in Asia-Pacific have re-opened to vaccinated travellers, the international passenger market is not expected to see significant improvement before the second half of 2022.

The region is expected to have the slowest recovery, reaching only 62% of 2019 levels in 2022. Full year recovery to 2019 levels is expected by the end of 2024 but could slip to 2025 if certain countries lag in lifting the remaining of their COVID-19 restrictions.



THE MIDDLE EAST

- The Middle East remained the most impacted region in 2021, despite some improvement in the second half of 2021, reaching only 41.6% of its 2019 level by year end.
- The region's high dependence on international travel and connectivity, both of which are recovering much more slowly than domestic travel, will continue to impact its recovery in 2022. The region is expected to reach 67% of 2019 levels by year end and fully recover only in late 2024.

2. MEDIUM-TERM GLOBAL PASSENGER TRAFFIC PROJECTION

Much uncertainty still surrounds the recovery of the aviation industry, especially in the medium to long-term. Projecting the path to recovery at this point is still an exercise requiring prudence.

Adding to the uncertainty related to vaccination mainly in emerging and developing countries and the risk of a fall/winter outbreak, we now need to add geopolitical conflict and related humanitarian crises, and the real potential for a strong economic downturn and looming recession. Those risks could dampen or delay the recovery.

Despite the downside risks, the industry remains confident that the potential for a recovery to 2019 levels within two or three years is foreseeable. There is no doubt that many people are eager to resume travelling and the early summer 2022 volumes are a testament to it.

With the combination of "vacation deprivation" and an upsurge in confidence in air travel provided by increased vaccination rates and safety measures, the relaxation of travel restrictions will help boost the propensity for air travel and fuel the industry's recovery.

And with many countries taking steps towards the return to a certain normality, lifting almost all the health measures and travel restrictions, ACI expects a jump in air travel demand in the second half of 2022.

Three scenarios in assessing the potential recovery trajectory were considered, using the following assumptions.

CURRENT SCENARIO:

- It assumes effective vaccine distribution and adoption in emerging and developing countries in 2022.
- The scenario takes into account the impact of Omicron in Q1 2022.
- This projection assumes growing consumer confidence in the resumption of travel in 2022, high but controlled inflation, and a limited chance for recession.
- It presumes a reasonable airline fleet recovery and ongoing relaxation of international travel restrictions.
- It assumes also that the supply cannot fully satisfy the demand for air travel.
- It posits that additional infection waves are possible in 2022 but they would be either contained and limited to specific regions or have less impact on air travel demand as the world is increasingly learning to "live with COVID-19."

OPTIMISTIC SCENARIO:

- It assumes effective vaccine distribution and adoption in emerging and developing countries in 2022.
- This scenario also assumes growing consumer confidence in the resumption of travel in 2022, that inflation will remain under control with minimal impact of an economic downturn on aviation.
- It also assumes a reasonable airline fleet recovery and ongoing relaxation of international travel restrictions.
- It assumes that the supply will satisfy most of the demand for air travel.



- It posits that additional infection waves are possible in 2022 but they would be either contained and limited to specific regions or have less impact on air travel demand as the world is increasingly learning to “live with COVID-19.”

PESSIMISTIC SCENARIO:

- This scenario considers still limited vaccine access, especially in many emerging and developing countries.
- It assumes that the fear of travelling, testing and quarantine requirements are present or reimposed among passengers in certain markets, that economic weakness is exacerbated with a substantial risk of recession, and that airline fleet recovery is slow.
- It presumes also that supply won’t be able to satisfy a significant portion of the demand for air travel.
- It posits that additional waves of infections are likely and could spread to multiple regions, and difficulties would exist in containing the spread of new variants. New waves of infection would affect both vaccinated and unvaccinated populations.

Under those assumptions, ACI World forecasts the following regarding the recovery of airport passenger traffic:

- Under the current projection, accounting for the slower than expected first quarter of 2022 due to the Omicron wave, global passenger traffic is expected to reach 2019 levels in late 2023 with the full-year recovery to 2019 levels in 2024.

The overall recovery will mainly be driven by the recovery of domestic passenger traffic but will be hampered by the recovery stagnation in Asia-Pacific and a slower recovery in global international travel (globally, domestic traffic accounted for 58% of total passenger traffic in 2019).

- Global domestic passenger traffic is still expected to reach 2019 levels in late 2023 with full-year 2023 traffic at par with 2019 levels. However, global international passenger traffic will require almost one more year to recover and will reach 2019 levels only by the second half of 2024. Full-year recovery to 2019 levels will only happen in 2025 for international passenger traffic.
- At the country-market level, markets having significant domestic traffic are expected to recover to pre-COVID-19 levels in mid-2023 to late-2023.
- Markets with significant shares of international traffic are unlikely to return to 2019 levels until 2024, some having even to wait until 2025.
- Due to the uneven availability of vaccines, geopolitical conflict and the resulting humanitarian crisis as well as the worsening economic outlook, some country-markets – especially emerging and developing economies – will probably not reach 2019 passenger levels before 2025 or 2026, especially those markets reliant on international traffic.

Annual World Airport Traffic Report

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RAISING THE BAR

MXD Development Strategists’ Chris LeTourneur outlines what we can expect from Jeddah Airport City and explains why he believes it represents the potential future of airport centric development.

Jeddah Airport City at King Abdulaziz International Airport (KAIA) is arguably taking airport-centric development to a new level, enhancing the western gateway to the Kingdom of Saudi Arabia for business, tourism, hospitality, sports, culture, worship, education, wellness, leisure and entertainment.

Jeddah Airport City is situated directly adjacent to and connected with the gateway’s 810,000sqm Terminal 1, which is one of the country’s most modern airport facilities, having opened in 2018.

Being developed in phases, Terminal 1 will allow KAIA to reach a capacity of 45 million passengers per year by 2030. Future expansion plans for KAIA could push this capacity to 114 million passengers per year after 2035. Pre-COVID 19, KAIA exceeded 40 million passengers in 2018.

KAIA is the country’s largest and busiest airport, driven by Hajj and Umrah Pilgrims making their journey to the holy cities of Mecca (Makkah) and Medina (Madinah) for worship and culture. Jeddah Airport City provides a refreshing and rewarding experience along this journey.

At the heart of Jeddah Airport City is the Haramain High Speed Rail Station. The Haramain High Speed Rail was opened in 2019 and connects KAIA with Jeddah and Mecca, with a travel time of only 43 minutes between Jeddah and Mecca, at speeds up to 300 km/h. High speed rail also connects KAIA with King Abdullah Economic City to the north, and Medina (Al Madinah Al-Munawarah), with a travel time of 75 minutes from the airport to Medina. It currently carries around 60 million passengers per year.

EVOLUTION OF JEDDAH AIRPORT CITY

Jeddah Airport City is part of ‘Kingdom Vision 2030’, a transformative economic and social reform blueprint opening Saudi Arabia to the world. It is envisaged that Jeddah Airport City will play a key role in enhancing the traveller experience and establishing KAIA as a global economic, transit, logistics, tourism and business hub, stimulating regional and national economic growth.

KAIA was developed under the guidance of the Jeddah Airports Company (JEDCO), with approval of the Saudi Arabian General Authority of Aviation (GACA). Jeddah Airport City is part of phase one of JEDCO’s Mega



Plan for KAIA, which also involves the planning and development of KAIA's Cargo City, unlocking the airport's local and international business opportunities.

Development of Jeddah Airport City at KAIA is being led by SARH Development Company (SARH). The concession was originally awarded by GACA (later JEDCO) to Fawwaz Alhokair & Partner. In March 2019, a partnership agreement between Fawwaz Alhokair & Partner (under the name Lynex Company) and SARH was approved by GACA to develop Jeddah Airport City.

Jeddah Airport City has a 44-year land lease with JEDCO, supporting a wide range of land uses and development.

With its broad experience in real estate investments and urban development, SARH is guiding the planning and development of Jeddah Airport City. SARH engaged AE Prime Engineering Consultants from the UAE and its partner, the Madrid Studio of global architectural firm Chapman Taylor, to generate the Mixed-Use Jeddah Airport City Concept Master Plan. JEDCO has approved this master plan.

SARH plans to begin construction of Jeddah Airport City in 2023, with full project completion by 2028. The first phase of construction will be completed in 2026 and will include the parking podium and Lifestyle Centre, which will contain a Shopping District, City Terminal, Creative Offices, University for Culinary Arts and Hospitality, Co-Working Space, Co-Retail Space, Restaurants, Entertainment and a 20,000 seat Arena.

Total investment in Jeddah Airport City is estimated to be \$4.5 billion, which will be funded by SARH and its Austria-based partner, AVORIS, using local and international financial models.

Sultan Bin Ali Al Harbi, chairman of SARH, says: "Jeddah Airport City will be Saudi Arabia's first airport city development in line with His Majesty, Crown Prince Mohammad Bin Salman's Vision 2030 for the development and transformation of Saudi Arabia, with the support of the Minister of Transport, Saleh bin Nasser Al Jasser. The project involves a 680,000 square metre plot of land directly adjacent to KAIA, the primary gateway to Jeddah and the holy city of Makkah.

"Jeddah Airport City will introduce a variety of uses, building types and amenities to create a 24/7 destination at the juncture of KAIA and Jeddah's evolving urban area, serving the needs of visitors and locals, while evolving Jeddah as a world class city. The broad range of uses and amenities will generate significant non-aeronautical revenues and financial returns, while improving the competitiveness and branding of KAIA and Jeddah."

COMPONENTS OF JEDDAH AIRPORT CITY

The Jeddah Airport City Concept Master Plan identifies 2,000,000 square metres of built-up area framed on each side of the Haramain High Speed Rail over four quadrants including:

- Zone 1 – Exhibition Circuit
- Zone 2 – Business District
- Zone 3 – Fun Zone
- Zone 4 – Calm Community



CONNECTIVITY WITHIN JEDDAH AIRPORT CITY

These quadrants will be connected by an activated grand parkway open space, botanical gardens, water features, pedestrian pathways, and a state-of-the-art mobility shuttle circuit, employing the latest in autonomous people moving technology.

A parking podium employing digital touchless technology and mobile applications will serve the four quadrants, as well as KAIA and the Haramain High Speed Rail Station.

CENTRAL GATEWAY GARDENS

A striking feature of Jeddah Airport City that will hold together its four quadrants is the Gateway Gardens.

This passive and active open space will incorporate dramatic landscaping, botanical gardens, public art, illumination and digital installations, similar to the famed Gardens by the Bay in Singapore.

ZONE 1 – EXHIBITION COMPLEX

A 50,000 square metre Exhibition Centre anchors the Zone 1 – Exhibition Circuit quadrant, interwoven with the Central Gateway Gardens and directly adjacent to KAIA Terminal 1 and the Haramain High Speed Rail Station.

Zone 1 also features a 5-Star Luxury Convention Hotel and 3-Star Hotel with a total of 650 rooms, complemented by a food & beverage dining cluster and retail uses.

ZONE 2 – BUSINESS DISTRICT

The Business District includes 200,000 square metres of offices over two phases in six-floor buildings. This office space will facilitate local and global companies, in sectors ranging from aviation and international trade to finance, innovation and technology.

Offices will be configured in a ‘Courtyard Campus’ format in five districts including: Financial District, Office District, Co-Working Area, Creative Offices East and Creative Offices West.

A 4-Star Business Hotel and 3-Star Business Hotel will support the offices in the Business District and be situated in direct proximity to KAIA Terminal 1 and the Haramain High Speed Rail Station.

Additionally, to accommodate the offices, airport employees, airlines and on-site University, a Serviced Apartments complex will offer fully furnished apartments equipped with full kitchens and have services and amenities including a fitness centre, laundry room and recreation room.

A 3,500 square metre Community Mosque will serve the Business District, as well as the larger Jeddah Airport City, interwoven into dramatic landscaped open space.

Ground floor retail and restaurants will activate the streetscape and provide a strong amenity for the Business District.

In addition, water features will be incorporated into the open spaces and streetscape to provide a cooling ‘canal-like’ waterfront view amenity for the offices, hotels, Serviced Apartments, ground floor restaurants and shops.

ZONE 3 – FUN ZONE

The Zone 3 – Fun Zone is anchored by a 68,700 square metre Arena housing 20,000 seats, becoming one of the largest indoor arenas in the Middle East.

The Arena will host large-scale theatrical performances, international live performances, concerts, elite sporting spectacles and national events, generating year-round footfall and attracting performers and visitors from around the world.

A Central Spine holding Zone 3 together and a Festival Plaza will be lined with destination lifestyle retail shops, restaurants, and entertainment. Indoor and outdoor food and beverage experiences are



designed within a pedestrian boulevard, as well as in a multi-level dining terrace that works in conjunction with a multiplex cinema and family entertainment centre.

The Central Gateway Botanical Gardens, including three large architectural domes, art installations and water features, will weave into Zone 3 on multiple levels providing view amenities. In 12,350 square metres, these domes will house the following three distinct themes: Sensorial Pavilion, Kids Pavilion, and Discovery Pavilion.

In conjunction with Media and Financial Offices, Co-Working Spaces, Creative Offices and Co-Retail Spaces are situated throughout Zone 3, stimulating innovation and entrepreneurial enterprise.

Arts, entertainment, culture and leisure functions are also situated throughout the Zone 3 – Fun Zone, including an Aquarium, Art Hall, Sports Leisure Box, Sports Branded Pavilion and activated LED Screens.

Another anchor of Zone 3 is a 20,000 square metre Airport Healthcare Clinic/Hospital to provide specialist care for Oncology and Cardiology, as well as Family Health, Maternity, Paediatrics, Outpatient Clinic Surgeries, Cosmetic Surgery, research and teaching.

There are two hotels in Zone 3, including a 4-Star Health Hotel (for hospital staff, patients and families using the Clinic/Hospital and wellness areas) and a 3-Star Themed Family Hotel.

ZONE 4 – CALM COMMUNITY RESIDENTIAL & CULTURAL DISTRICT

Unlike most airport city developments, Jeddah Airport City features 53,000 square metres of Residential Duplexes and Apartments over six floors, integrated with lifestyle dining and shopping in a traditional Middle Eastern ‘Balad’ configuration.

Like the other zones, a sustainable mix of water features and landscaped open space will hold the Calm Community together and provide views from within Zone 4.

Zone 4 will also house the Arabian Museum of Arts & Culture, as well as Universities and innovation hub activities, bringing a level of sophistication and amenity to the nearby residential community.

OPERATING PARTNERS

Implementation of Jeddah Airport City has already attracted interest and commitments from various Saudi Arabian and global companies including KERB Parking Innovations (from Australia/Singapore), ASM Global (for the Arena and Convention Centre), KERTEN Hospitality and MXD Development Strategists (from Canada).

Office spaces in phase one of the Zone 2 – Business District have attracted interest from major airlines and tourism companies desiring direct connectivity with KAIA.

IMPLICATIONS FOR AIRPORT CITY DEVELOPMENT

Recognising the unique location of Jeddah Airport City at the convergence of urban Jeddah with KAIA and the Haramain High Speed Rail Station, Jeddah Airport City evolves the airport city concept into exciting new directions that merge urban uses with the airport environment.

In addition to traditional airport city functions, Jeddah Airport City introduces Arena, University, Healthcare Clinic/Hospital, Serviced Apartments, Residential, Religion, Arts, Culture, Entertainment, Botanical Gardens, Multi-Media, Autonomous Mobility Shuttles and Automated Frictionless Parking as key elements.

With this wide range of uses, Jeddah Airport City is setting a new bar for airport city development.

ABOUT THE AUTHOR

Chris LeTourneur is president and CEO of Canada-based MXD Development Strategists.



PLANNING AHEAD

Asia-Pacific Airports takes a closer look at a handful of key infrastructure development projects making headlines across the region.

CHONGQING JIANGBEI INTERNATIONAL AIRPORT'S NEW TERMINAL 3B

Construction of Chongqing Jiangbei International Airport's \$3.5 billion Terminal 3B and fourth runway are said to be going well, with the new terminal seemingly on target to be completed in late 2024.

When open, the Chinese gateway will be equipped with four runways and four terminals that between them are capable of handling up to 80 million passengers and 580,000 aircraft movements per annum.

According to the Civil Aviation Administration of China, China will this year accelerate the construction of a world-class airport cluster for the development of the Chengdu-Chongqing economic circle.

The Chengdu-Chongqing economic circle is an important regional development strategy following the Beijing-Tianjin-Hebei region, the Yangtze River Delta and the Guangdong-Hong Kong-Macau Greater Bay Area.

"Creating the airport cluster is a crucial task for the construction of the economic circle," said administration official, Sun Wensheng, noting that the airports in the region do not currently have sufficient capacity to handle international flights.

If all goes to plan, by 2025 the airport cluster will have 12 airports with annual transport capacities of 210 million passengers and 3.7 million metric tons of cargo, handling about 1.5 million flights annually, according to a circular issued by the administration.

The Nordic – Office of Architecture, which won the interior design competition for the 350,000sqm Terminal 3B, reveals that its concepts for the new complex – which when complete will become the world's largest airport satellite building – were shaped by local rivers and Chongqing's rich culture, history and scenery.

The firm, which is working on the project with the China South West Architectural Design Institute and Shanghai United Design Group, notes that "safe, green, smart and human-oriented" were also central focuses of T3B's design.

We can report that the main steel and concrete structure of the new terminal has been completed and that construction work will now focus on the roof structure, the façade, the electro-mechanical plumbing systems and the interior.

The new terminal is being constructed by China Construction Eighth Engineering Division, which has helped build facilities at more than 70 airports in China.



SINGAPORE CHANGI'S TERMINAL 5

Construction of Changi's planned Terminal 5 is set to resume in 2024, ensuring that it is operational by the mid-2030s, according to Singapore's Transport Minister, S. Iswaran.

Work on the project was halted in May 2020 when the global COVID-19 pandemic began to bite in Singapore, and passenger numbers at the gateway – like in much of the rest of the world – plummeted due to new health requirements and travel restrictions.

Iswaran notes that the original designs of the new terminal have been updated since May 2020 and will continue to be fine-tuned to ensure that it is equipped to meet future demand.

In effect this has meant that T5's design has become "more modular and flexible" as a result of the pandemic, which has shown just how quickly the operational requirements of airports can change in a crisis.

The pandemic, for example, has sped up the implementation of new touchless technologies at airports across the globe and led to the launch of a host of new apps which travellers can use to order food and drink to be delivered to them rather than having to queue up to order or dine at an airport restaurant.

Iswaran reveals that Terminal 5 will enhance Changi's capacity, better equipping it for when international air travel fully rebounds.

He says: "We have taken the opportunity of the two-year hiatus to comprehensively review the T5 design to make it more modular and flexible and enhance its resilience and sustainability.

"Given the current and projected recovery in air travel demand, we have a renewed impetus to secure our infrastructural capacity for growth."

Changi Airport's T5 was set to handle up to 50 million passengers a year in its initial phase, and cover a land area equivalent to about 667 football fields. Whether this remains the case is unclear as much has changed since the project was first announced in 2013.

What is clear though is the fact that T5 will be a green and sustainable building, equipped with solar panels and smart building management systems as well as being ready for the next generation of alternative aircraft fuels.

LONG THANH INTERNATIONAL AIRPORT

Vietnam's Long Thanh International Airport is a step closer to reality following the announcement that its long-awaited construction is set to start in October 2022.

The new \$16.3 billion super hub will be located 40 kilometres east of Ho Chi Minh City and boast four runways and four passenger terminals capable of handling up to 120 million passengers by full build out in 2050.

The city's existing Tan Son Nhat International Airport (SGN) has comfortably handled in excess of 36 million passengers per annum and will continue to be upgraded and expanded to meet demand. But its location at the centre of a densely populated area of Ho Chi Minh City effectively rules out any significant new additions to its infrastructure and means that the government must look for capacity enhancing options elsewhere.

Long Thanh International Airport's master plan outlines three phases of construction, with the first phase scheduled for completion in 2025, including the development of a single terminal building, a 4000m x 60m runway and facilities to accommodate up to 25 million passengers and 1.2 million tonnes of cargo per annum.



FROM MAPPING TO TRANSITION

Airport International Group’s Rula Dawood charts Queen Alia International Airport’s pioneering decarbonisation journey in ACI’s Airport Carbon Accreditation programme.

A few years after being awarded the 25-year concession to manage the rehabilitation, expansion and operation of Queen Alia International Airport in Jordan, Airport International Group (AIG) commenced the airport’s decarbonisation journey.

From the outset it was determined that Amman’s gateway to the world would follow the rigorous standards of ACI’s Airport Carbon Accreditation (ACA) programme – the only institutionally endorsed, global carbon management certification scheme for airports.

As a result, AIG – a subsidiary of Groupe ADP – diligently developed a carbon footprint report and identified the primary sources of all on-campus greenhouse gas emissions. And the efforts paid off as in 2013, Queen Alia (QAIA) became an ACA-verified airport for the first time in its history, successfully achieving Level 1 ‘Mapping’ status in the programme.

Following the inauguration of QAIA’s new terminal and the rise in annual passenger capacity from 3.5 million to 9 million in 2013, Airport International Group recognised the significance of advancing to Level 2 ‘Reduction’ status by

devising an effective carbon management plan and showing quantified emissions reductions.

Two years later, in 2015, QAIA officially became the first airport in the Middle East to achieve this feat.

Another important advantage to reaching the ‘Reduction’ level was devising an energy-saving action plan for the next five years, especially since 94% of emissions were due to Scope 2 (electricity consumption).

AIG was determined to complete most energy saving measures in the initial plan and, by 2019, had realised a 20% emissions reduction against the baseline year of 2012.

Before then, in fact ahead of the inauguration of the second phase of the new terminal in 2016, AIG successfully gained Level 3 ‘Optimisation’ status in the ACA programme, once again becoming the first airport in the Middle East to achieve the goal.

For this level, QAIA focused on engaging with major airport stakeholders such as the airlines, ground handlers, fuel service providers, catering agents and other relevant



parties to promote the benefits of on-site energy conserving practices to reduce emissions from their activities and ensure a comprehensive and concerted approach to carbon management.

Several stakeholders offered proactive responses, such as aircraft maintenance companies curbing electricity consumption, while others replaced many of their gas guzzling older vehicles with zero-emission electric ones.

It is worth noting that although not directly connected with ACA, two energy-saving projects implemented between 2014 and 2019 twice earned QAIA Green Airports Recognition awards from ACI Asia-Pacific.

The first was in 2017 when QAIA won the ‘Silver’ ACI Asia-Pacific Green Airports Recognition award for converting airfield lighting along the Southern Runway from halogen to LED lights. The second, a ‘Gold’ recognition, was granted in 2022 as a result of a 15% drop in carbon emissions attained by enhancing the heating and cooling system throughout the terminal building.

In terms of its ACA journey, QAIA upgraded to Level 3+ ‘Neutrality’ status in 2018 by offsetting residual carbon dioxide from Scopes 1 and 2 (fuel and electricity consumption) by supporting other accredited, eco-friendly projects that decrease carbon dioxide.

In doing so, QAIA extended its streak as the first airport in the Middle East to realise this distinguished environmental accomplishment.

Between 2015 and 2020, Airport International Group conducted two energy audits to identify opportunities to introduce energy-saving measures. Per the latest audit, an additional 18 projects entered the pipeline for implementation between 2020 and 2025, with expected 15% energy savings.

In 2022, QAIA became the first airport in the Middle East and the second in the ACI Asia-Pacific region to reach ACA Level 4+ ‘Transition’ status – which is valid until the renewal date in 2025.

QAIA was awarded the certificate following a rigorous review of its carbon management processes, which affirmed alignment with global climate goals to reach a net-zero carbon status by 2050, in addition to its establishment of a roadmap to reduce carbon emissions from fuel and electricity consumption and the ongoing responsible compensation of residual carbon emissions under its control, per the global airport industry’s response to climate change.

One of the major upcoming projects is a 4.8MW solar farm, which will be built on the airport’s north side. AIG should obtain the necessary approvals in 2022 and execution is expected to begin in 2023.

In alignment with global climate change goals to make aviation a carbon free industry by 2050, Airport International Group has pledged its commitment to transforming QAIA into a net-zero airport by the above target year.



To this end, AIG has outlined a roadmap to achieve this goal, focusing on Scopes 1 and 2 as direct emissions and other actions that would address Scope 3 (emissions relating to third parties).

QAIA's long-term carbon objective is to reduce 59% of its 2012 baseline emissions by 2035. However, one of the biggest challenges to fulfilling this goal is the unavailability of certified grid decarbonisation, which would enable AIG to utilise green energy sources directly from the electricity grid in addition to the one supplied by the solar farm. This obstacle is being discussed with relevant authorities in Jordan to garner their support.

Airport International Group also began implementing other actions to limit Scope 3 emissions, such as transferring organic waste to a biogas waste treatment centre that generates electricity and serves the local community.

Moreover, since January 2022, airline operators have been obliged to shut down aircraft auxiliary power units on contact stands and use ground power units, either ones supplied by the ground handler or fixed electrical ground power. The expected carbon emission saving from this endeavour is still under evaluation. In addition to these electricity saving actions, other emission reducing measures currently being assessed by the airport include using eco-friendly gas instead of diesel to operate the boilers in the terminal building.

AIG remains firmly committed to managing a sustainable, climate-friendly airport in support of UN Sustainable Development Goals and the Paris Agreement by deploying environmental best practices at QAIA and updating its energy conservation procedures, while paving the way as a national, regional and international leader in environmental management.

“Since 2013, Queen Alia has been setting an example of what it means to be a climate-friendly airport and has been the first in the Middle East to achieve ‘Neutrality’,” enthuses AIG CEO, Nicolas Claude.

“Such a proud feat is instrumental in highlighting not only Queen Alia, but also Jordan, on the global aviation stage. Given the deliberate industry-wide shift towards environmental best practices, we at Airport International Group are keen on building an even more sustainable and responsible international airport.

“On this note, I extend my sincerest thanks and congratulations to our team, partners and stakeholders on helping QAIA achieve yet another distinguished milestone and for continuously going above and beyond to ensure that the airport remains a trailblazing, sustainable and tourism-enabling gateway within the region.”

ABOUT THE AUTHOR

Rula Dawood is AIG's manager for the environment, social, health and safety, quality, safety and risk management.



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HIGH FASHION AT SYDNEY AIRPORT

Sydney Airport is reinvigorating the luxury retail precinct in its T1 International terminal with the arrival of some of the most sought-after brands showcased in a new-look 2,700sqm streetscape.

Joining Sydney Airport for the first time are Balenciaga, Bottega Veneta, Loewe, Prada and Saint Laurent – all of which are now open for business – with Cartier, Celine, Dior, Gentle Monster, Louis Vuitton, Moncler, Valentino and Versace to follow.

Heinemann Tax & Duty Free will also unveil a new Beauty, Fashion, Luxury Timepieces and Jewellery offer which will complement the new luxury precinct.

In addition it will introduce a range of activations in the new year that will be exclusive to passengers travelling through Sydney Airport's T1 International terminal.

Sydney Airport's executive general manager commercial, Mark Zaouk, said: "International passengers can also look forward to a number of Australian firsts, including Louis Vuitton's first travel retail store in the southern hemisphere and the brand's largest stand-alone travel retail store in the world and Gentle Monster's first store in Australia and New Zealand.

"I'm delighted to see our revitalised vision for T1 taking shape as we firmly position Sydney Airport on the world stage. And with a further nine luxury brands to launch by mid-2023, I'm looking forward to seeing passengers enjoy the new retail experience as we welcome them back to international travel."

WBP PROFILES



BECA LTD

Location: New Zealand

Type of business: Consulting & Management

W: www.beca.com

Beca is one of the largest employee-owned engineering and related consultancy services companies in Asia-Pacific. As well as numerous engineering consultancy services, it offers architecture, planning, project and cost management, land information, valuations and process improvement services. It also supplies engineering and related consultancy services. Beca has worked at airports across Australia, New Zealand and the Pacific islands as well as at Changi and Hong Kong.

NEC CORPORATION

Location: Japan

Type of business: IT & Communications

W: www.nec.com

NEC Corporation is a leader in the integration of IT and network technologies that benefit businesses and people around the world. For more than 50 years NEC has been a leading provider of air traffic control and airport systems in Japan and is continuously expanding its presence in the global aviation market. The company's product portfolio today includes air traffic control systems and a variety of airport IT solutions, including flight information display system (FIDS), bird detection system (BDS), security and biometrics systems.

TRANSOFT SOLUTIONS (AUSTRALIA)

Location: Australia

Type of business: Handling & Airfield

W: www.transoftsolutions.com

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