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Environment Initiatives at Sharjah International Airport



Intergovernmental

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Sharjah International Airport





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Sharjah International Airport

- The first Airfield in the region opened in 1932
- Moved to the new location in 1979
- New 4060 meter runway opened in 2014 one of the regions longest.
- Reached 11 million passengers and 75967 aircraft movement in 2016 with an average growth of more than 10% per year.
- Airport Expansion project including terminal expansion to increase the capacity to 25 million passengers per year is in progress.





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SIA & Environment

- Carbon / Energy Policy
- Airport Carbon Accreditation
- Energy Reaction
- Clean Energy
- Green Vehicles & Green Parking
- Waste Management
- Waste Water
- Solid Waste
- ISO-14001-2015 Environment Management System
- Air Quality Noise
- Green Airport Oasis
- Training & awareness

MONTREAL, CANADA, NOVEMBER 29-30, 2017



Sharjah Airport Authority (SAA)
Carbon /Energy Policy

Sharjah Airport authority is committed to Operate Sharjah International Airport in a sustainable manner to ensure minimum impact on the environment and reduced carbon footprint and energy consumption through the following,

- Understanding activities of our operation that emit carbon & consume energy; and developing plans to ensure that these activities are monitored.
- Actively manage carbon emission/ energy consumption that are within our control through a formal carbon management plan, including performance improvement targets and systematic framework for monitoring, measuring and reporting our carbon emission.
- Identify the methods by which Airport can reduce the carbon emission/ energy consumption from the sources where it can influence, guide and develop an action plan to ensure a reduced carbon emission/ energy consumption.
- Systematic and time bound implementation of carbon management plan and continuous monitoring to evaluate the effectiveness of the same which leads to a carbon neutral growth of Sharjah International Airport.

Approved By :

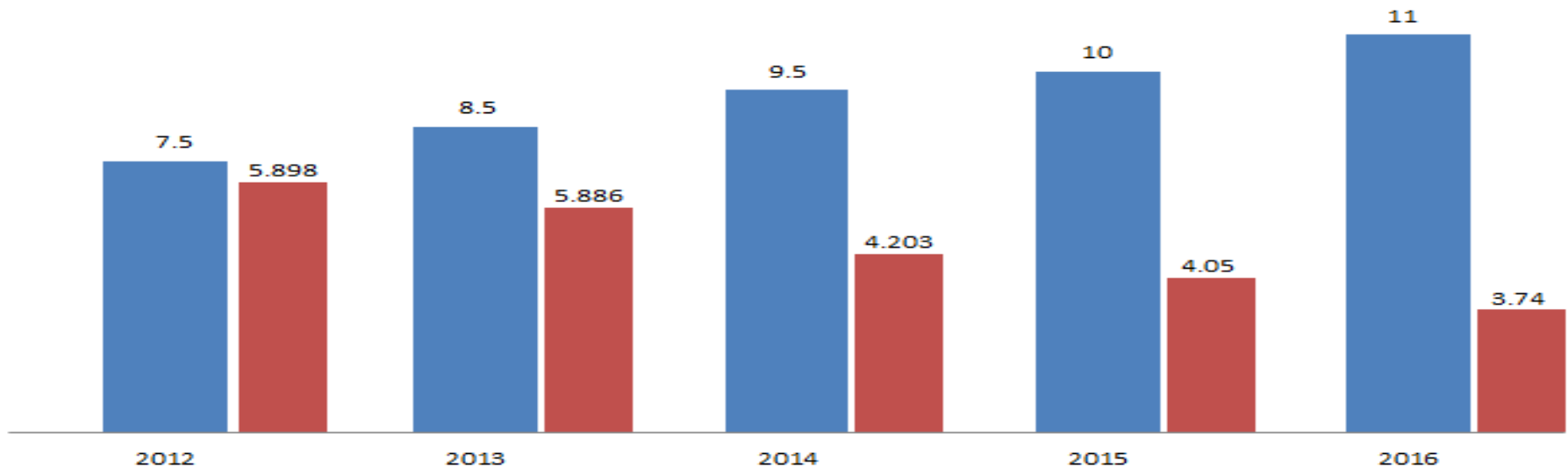
Ali Salim Al Midfa
Chairman
Sharjah Airport Authority

Airport Carbon Accreditation

- SIA Achieved level-1 mapping(in 2014) and level-2 reduction (in 2016) as second airport in the region.

Total Passengers / Per Passenger Emission 2012-2016

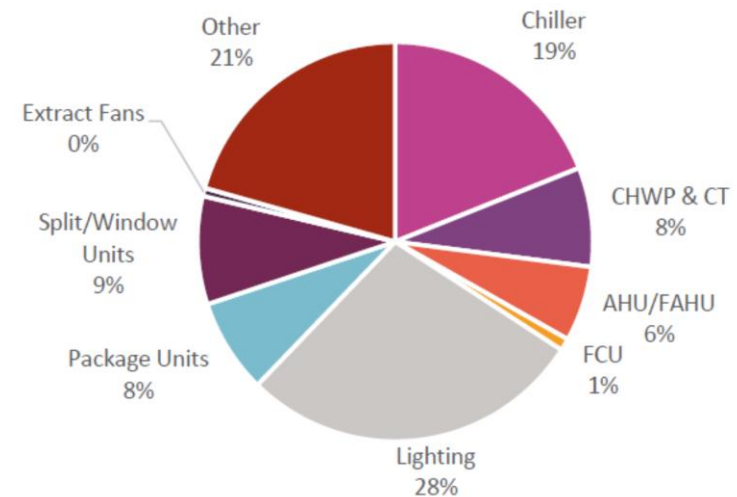
■ Total passengers (in Millions)
■ Per passenger emissions (in KG)



Energy Reduction

- Conducted an energy audit in 2016
- Introduced energy efficient lighting in the passenger terminal and cargo terminal,
- Energy efficient VSD chillers with lower kwh/ton
- Energy efficient airfield lighting with Latest LED technology
- Upgraded building management system,
- Solar reflectors to reduce heat gaining in terminal
- An Energy Management Proposal is in progress based on the Energy Audit.

Energy Breakdown by End Use



Clean Energy

- UAE Vision -2021- 27% of UAE's total Energy mix will clean energy by 2021
- SIA Introduced Solar Lighting system at:
 - New Management Car Park
 - New Rent a car park
 - Walk ways in departure car park
- Total of 50 light poles and 61 individual lights connected to 33 solar panels.
- Solar lighting for new staff car parking with 1200 car parking is in the tendering stage.





Green Vehicles

- SIA ground handling replaced ground handling vehicles and equipment's with green/electrical one's.
- Currently around 15% of the equipment's and vehicles are electric.



Green Parking

- Introduced reusable parking card system in 2011
- Re usable plastic coins Instead of paper tickets
- Saved 7.33 million tickets till last month
- Approximately 500 trees are saved.

Waste Management

Waste water

- SIA ensures 100% recycling of its waste water and reuse of it.
- SIA Sewage treatment plant capacity with 1000 m³/per day with an average flow of 41.76m³/hr.
- Includes chemical and biological treatment
- Treated water used for gardening.
- Sludge from the treatment plant use as fertilizers for gardening.
- A Proposal is in Progress to increase the capacity from 1000m³ to 3000m³.
- Water waste from GSE& VM recycled with oil water separator and re used for vehicle washing. Waste oil recycled through external agents



Solid Waste Management

- Ensure Zero landfill waste at the airport with the support of Bee'ah, the Sharjah Environment Management Company.
- Segregated waste bins are installed by SIA & Bee'ah
- Wood, metal, paper etc collected separately and recycled through external agents
- Hazardous waste are disposed with the support of Hazardous waste management Division of Bee'ah and Sharjah Municipality.





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ISO 14001-2015 Environment Management System

- SIA Introduced its Environment management system in 2007.
- Conducted a complete Environmental Impact assessment of Airport Operation.
- Possible mitigation/Control measures are identified and implemented.
- Upgraded to ISO 14001-2015 standards in 2016.





Air Quality & Noise

- SIA monitor its local and Indoor Air quality with its mobile air quality monitoring station.
- Monitoring parameters includes PM10,PM2.5, PM1,H2S,NO2,SO2, CO,CO2, and VOC's
- A proposal to monitor noise impact of aircraft is in progress
- To Improve Internal Air Quality SIA maintains 885 Internal Plants and to Improve local Air Quality SIA maintains a green oasis around the airport.



Green Airport Oasis

- SIA develop and maintains a green oasis in and around the Airport.
- SIA planted and maintains 9477 trees.
- Around 54710 m² green grass area
- 885 Indoor plants
- More than 1950m² seasonal plants



Training & Awareness

- Conduct environment training and awareness campaigns regularly.
- Participate in events such as:-
 - Earth hour
 - World Environment Day, etc
- Awareness campaigns through social media for the public.
- Resource conservation initiatives.





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Thank you

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