

# **CAPACITY BUILDING FOR CO2 MITIGATION FROM INTERNATIONAL AVIATION**

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**Kenya Airports Authority**  
**SETTING OUR SIGHTS HIGH**

**PRESENTED BY:**

**PETER WAFULA**

**AIRPORT MANAGER**

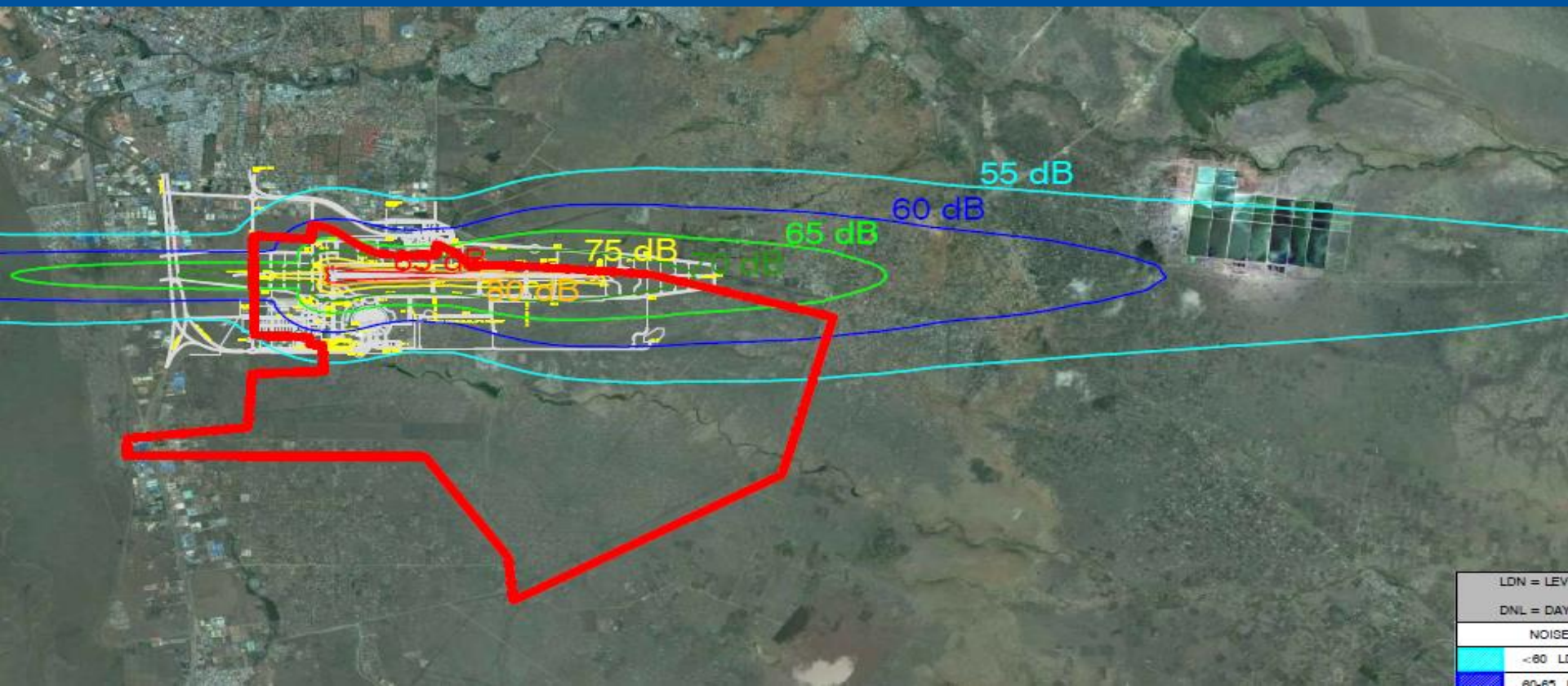
**MOI INTERNATIONAL AIRPORT**

# ENVIRONMENT SUSTAINABILITY

- KAA strives for environmental sustainability and has a fully fledged environmental section that works towards promoting integration of environmental considerations in all airport activities in compliance with environmental standards and legislations
- Towards achieving Environmental sustainability objective, KAA has undertaken various environmental initiatives; which include establishment of solar power plants at Eldoret Airport, Manda Airport and now MIA through the ICAO-EU financial support.

# KAA ENVIRONMENT INITIATIVES

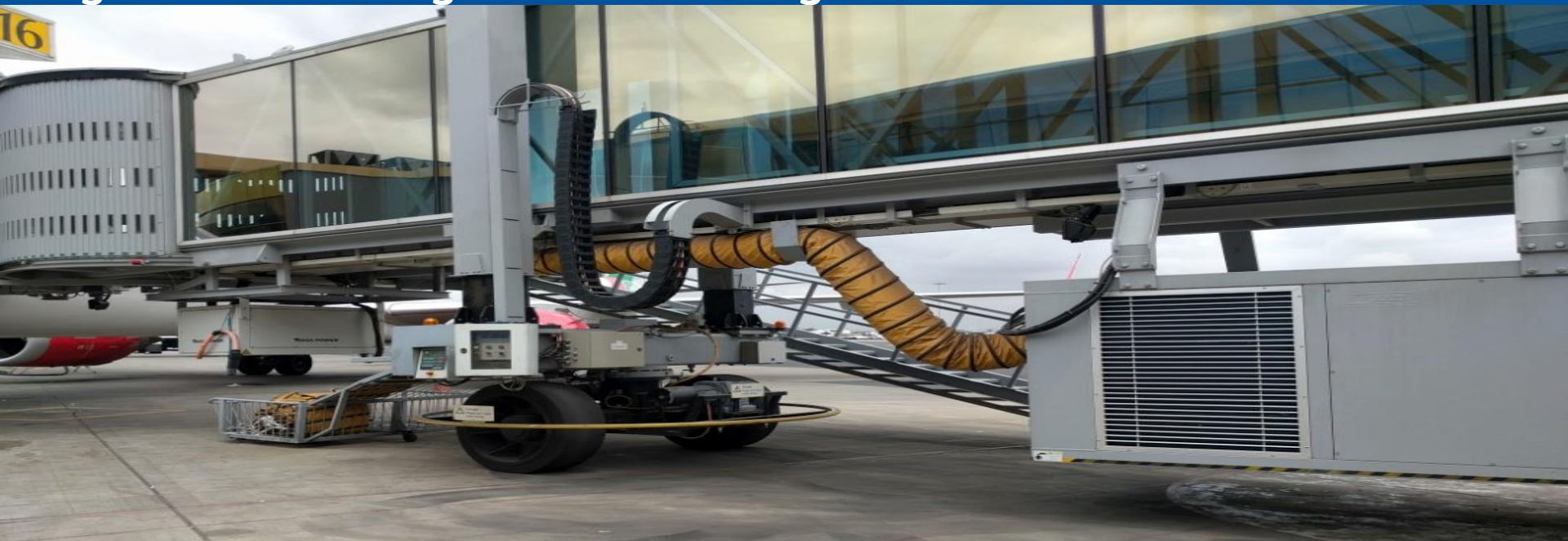
- Development of an Environmental Policy
- Development of EIA/EA guidelines
- Development of Noise Maps and Noise mitigation action plans for JKIA, MIA, EIA, KIA and soon Wilson Airport. KAA is the first institution to achieve this in the country





# CO<sub>2</sub> REDUCTION MEASURES

- KAA is committed to reducing GHG Emissions at the Gate and on the Ground we are working with Airlines to reduce emissions from APUs and Ground Support Equipment (such as tractors, ground power, pneumatic power, push backs, buses, refueling trucks). KAA has installed Auxiliary Power Units (APUs) that are environmental friendly. Airlines are connecting to the APUs instead of using the GPUs which are run by fossil fuels in order to reduce emissions generated during aircraft servicing.



# Replacement of current streetlights with LED in All Airports





- Construction of New Terminal buildings that are more environmental friendly with natural lighting.





- KAA has planted and maintained trees in various airports to promote ecological restoration: 200,000 trees in Eldoret Airport, 150,000 in JKIA, 6000 in Kitale, 3000 in Isiolo Airport, 3000 in Nyaribo Airstrip, All these trees were planted as a carbon sink.





- Undertaking environmental audits which involve evaluation of airport activities & processes of ongoing projects to determine how far they conform to sound environmental requirements.
- Development of waste Audits & prepared waste Mgt plans in accordance with national regulations.





# SOLAR AT THE GATE PROJECT FOR MIA

- The ICAO-EU project is a pilot project that will demonstrate the use of solar energy for the provision of ground power and preconditioning air to aircraft at the gate. (1<sup>ST</sup> of this kind in Africa)
- This equipment will allow aircraft serving international flights to switch off their Auxiliary Power Unit (APU) when parked at the gate, thus reducing carbon dioxide (CO<sub>2</sub>) emissions from international aviation activities.

# **SOLAR AT THE GATE PROJECT FOR MIA**

- **Excess electrical power (if any) will be used to generate co-benefits by reducing domestic CO<sub>2</sub> emissions generated by the airport**
- **Save on electricity demand**
- **Domestic flights will also be encouraged use the Auxiliary Power Unit (APU) when parked at the gate.**



# How has KAA benefited with this Solar Power Project?

- Expected savings on electricity
- Reduction in carbon emissions will contribute towards the efficient operations of Moi International Airport
- Onsite training of KAA Electrical Engineers on installation of Solar power projects
- Enhanced networks within the aviation industry (KAA, KCAA, Airlines, NEMA, Ministries,)

# Benefits

- Enhanced networks internationally (ICAO, ACI, AFCAC and the entire Africa region)
- Participation in global committees (ACI)
- Participation and sharing of experiences in climate change conferences/seminars
- Enhanced team work for projects
- Reduction in emissions (clean and healthy environment at the airport)
- Shared cost of maintenance by user subscription.



# What Challenges did we encounter and how did we solve them?

- Times lines were short : we shared duties within the PIT
- Other official duties : Sharing of duties, Weekly meetings to keep track
- Lack of good understanding of the clearing processes at the Port : Use of personal contacts

# What is the Future for MIA

- The ongoing phasing of indoor lighting for MIA terminal building lighting to LED and replacement of current streetlights with LED in MIA
- Replacement of All airside vehicles with electrical ones
- Installation of GPUs at all Gates that will be using solar power to charge aircrafts

Rain water harvesting project is under construction



# What is the Future for MIA

- Tree planting on land set aside for the activity
- Annual Environmental Audit is ongoing to assess our operations and their impacts on environment. An environmental Management plan will be developed for implementation
- Acquire Airport Carbon Accreditation

A landscape photograph showing a dark asphalt paved area in the foreground, a strip of dry grass in the middle ground, and a dense forest of tall, thin trees in the background under a clear blue sky. The text "Thank you" is overlaid in white on the right side of the paved area.

Thank you