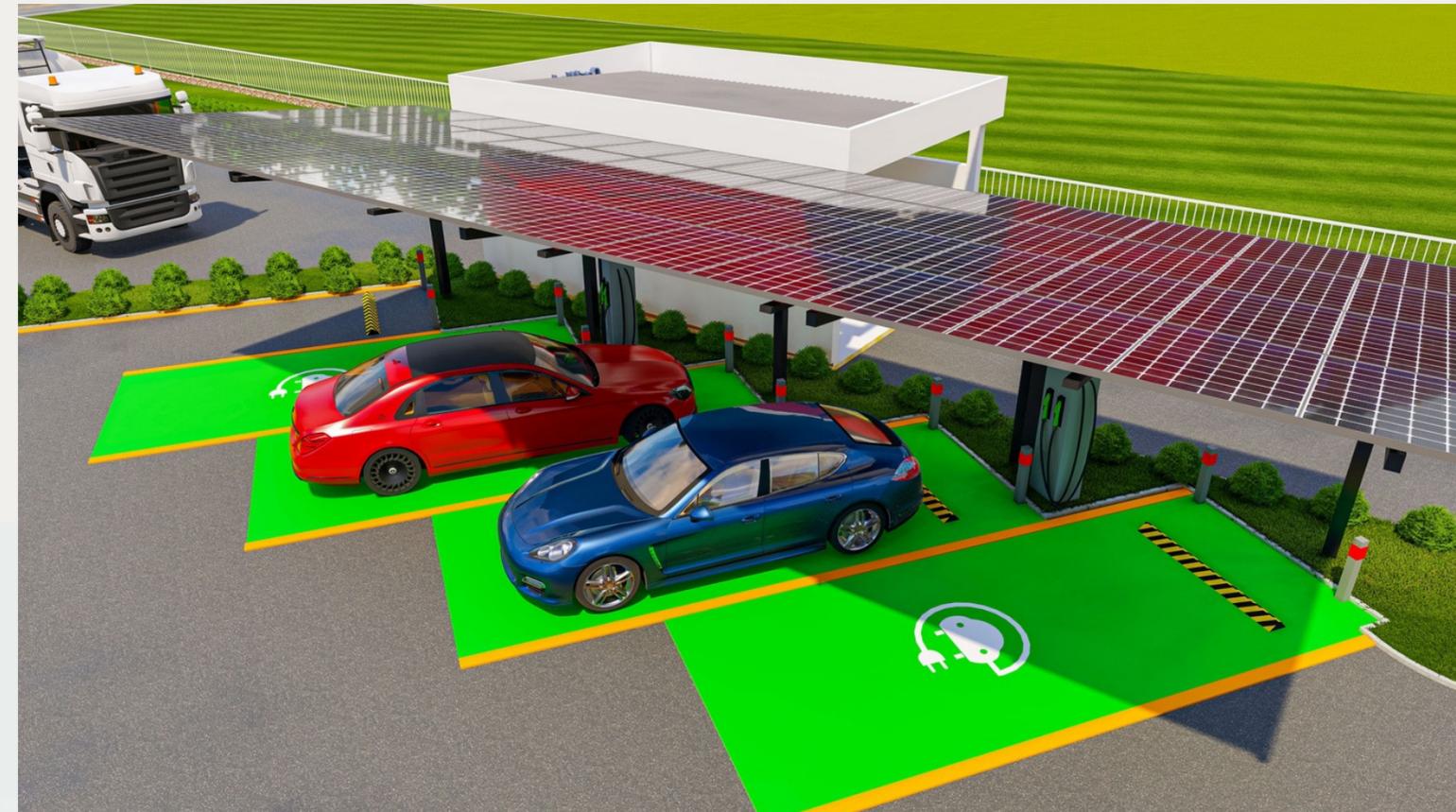


Towards Green Airports

Presentation by:
Irene Ghadi & Joshua Oduor
KNIGHTS AND APPS LTD.

About Knights & Apps.

- A renewable energy company specializing in low carbon technologies with a special emphasis on Solar PV systems.
- Through Drivelectric, we develop, advocate and enhance e- mobility solutions (EVs and charging infrastructure) powered by solar energy.
- This is a countermeasure against the soaring CO₂-related emissions in the transport sector.



Experience

Projects

Eg Roadmap to E-mobility study in Kenya (2021)

Spearheading e-mobility

We have installed Widest charging network in the region.

We imported the first EV in the East African region

Development of Standards

- Member of the KEBS Technical committee for the development of E-mobility standards and guidelines in Kenya.

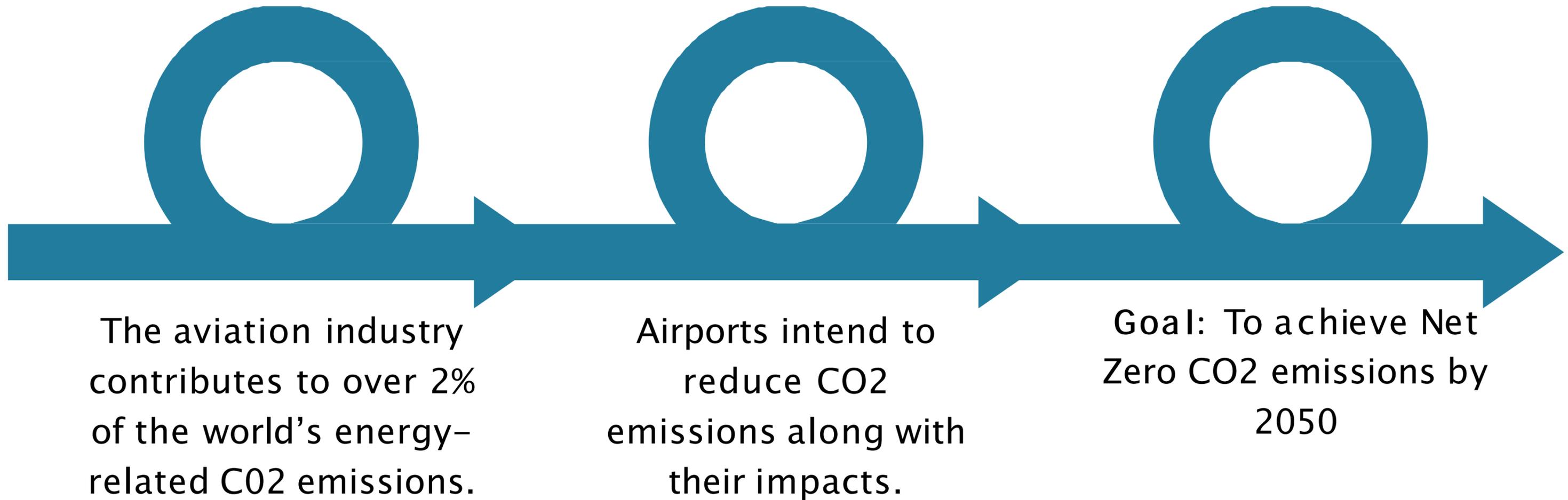
Partners

- Value Partners – United Nations Environment Programme (UNEP)
- Research Partners – Climate Compatible Growth (CCG) Academia partners
- Training partner – PManifold
- Academia Partners – Strathmore University



Carbon
Emissions
reduction in
airports

Background



Carbon Footprint in an Airport

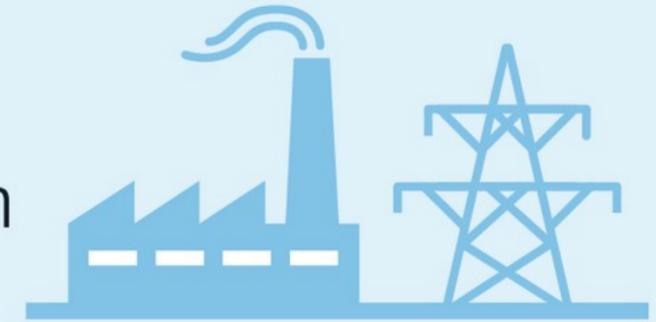
Scope 1

Direct emissions from energy production and transport



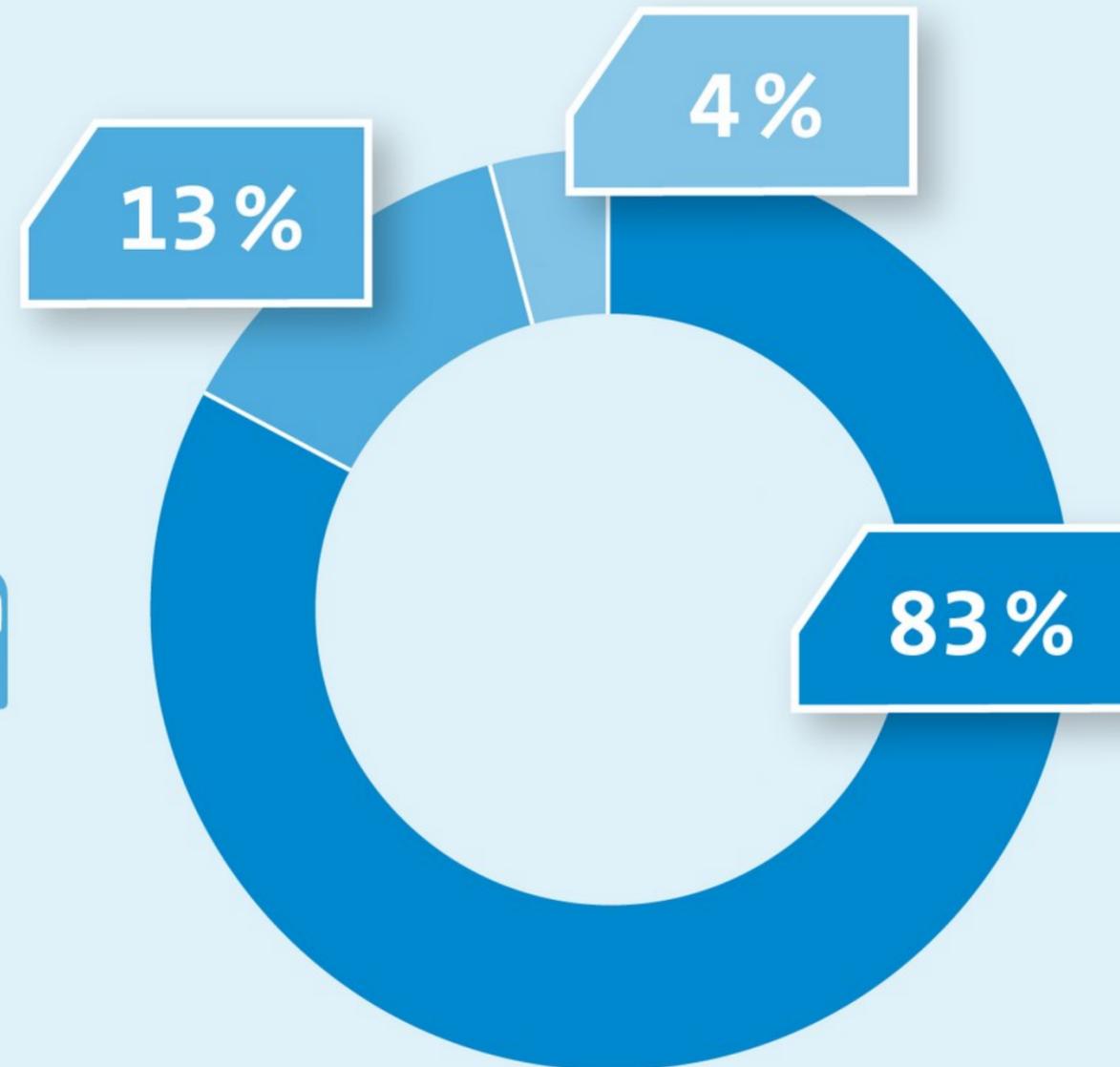
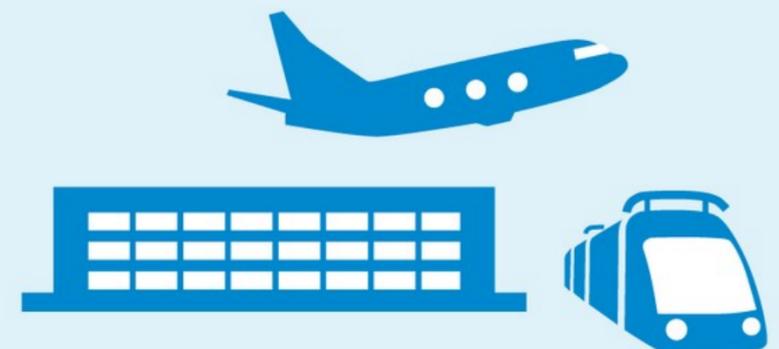
Scope 2

Indirect emissions from energy procurement



Scope 3

Indirect emissions from the airport's business environment

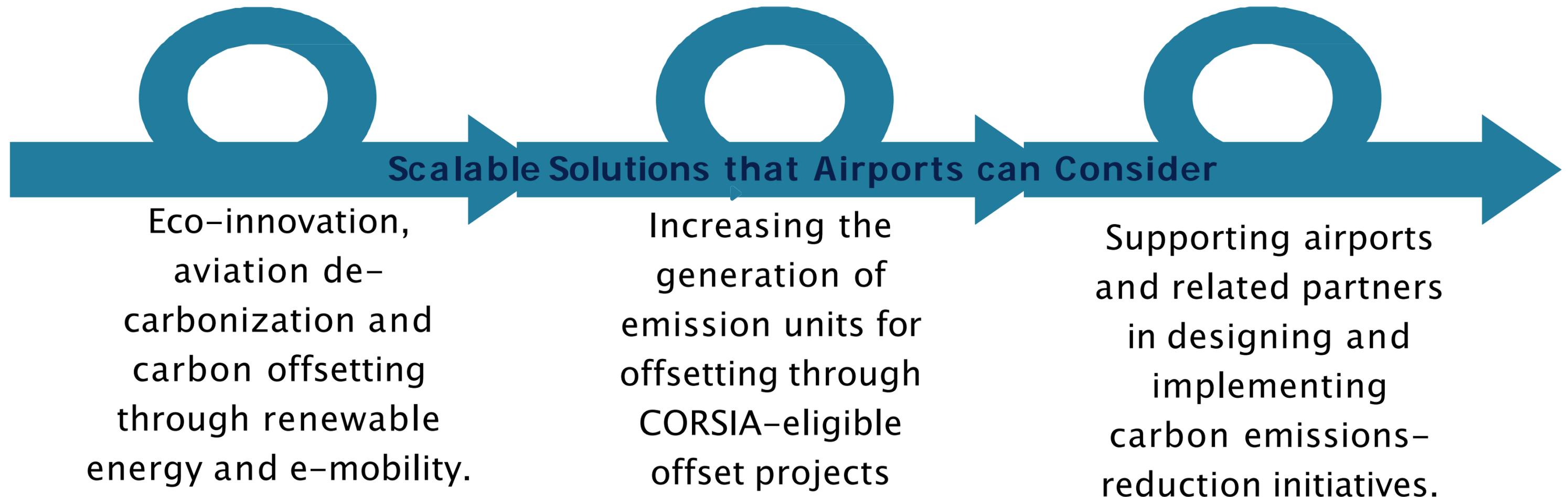


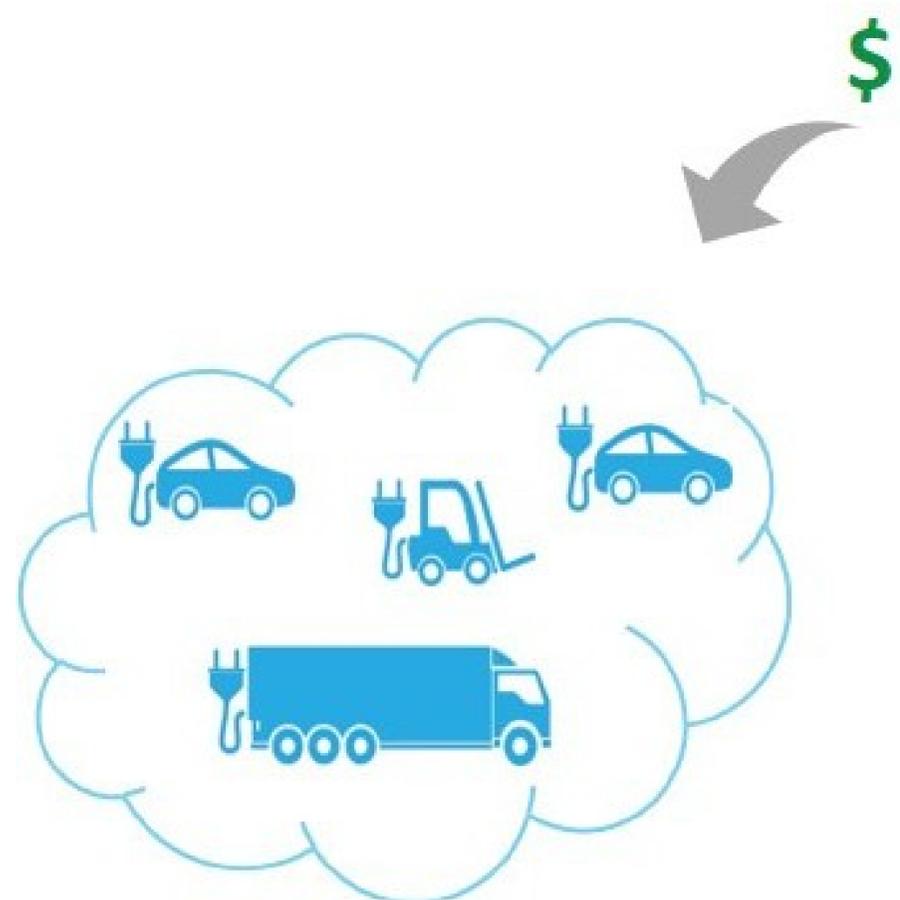
Some of the endeavours being pursued by airports

- 
- Electrification of onsite transport for ground handling and passenger transport.
 - Switching to eco-friendly lighting i.e. LED
 - Investing in sustainable energy— i.e. wind, hydro and solar.
 - Fostering collaborations amongst air transport partners i.e. airports, airlines, ground handlers
 - Joining low carbon emissions initiatives:

Future Opportunities in carbon emissions reduction.

- Creation of synergies with stakeholders (airports, airlines, third-party companies/organizations) in offsetting using carbon emissions units.
- Availability of carbon emission units for purchase.





**Fleets with vehicles
& equipment
fueled by electricity.**



Monetized credits



Carbon credits



Obligated Parties

**The rationale for Carbon
offsetting.**

Electrifiable fleet in airports

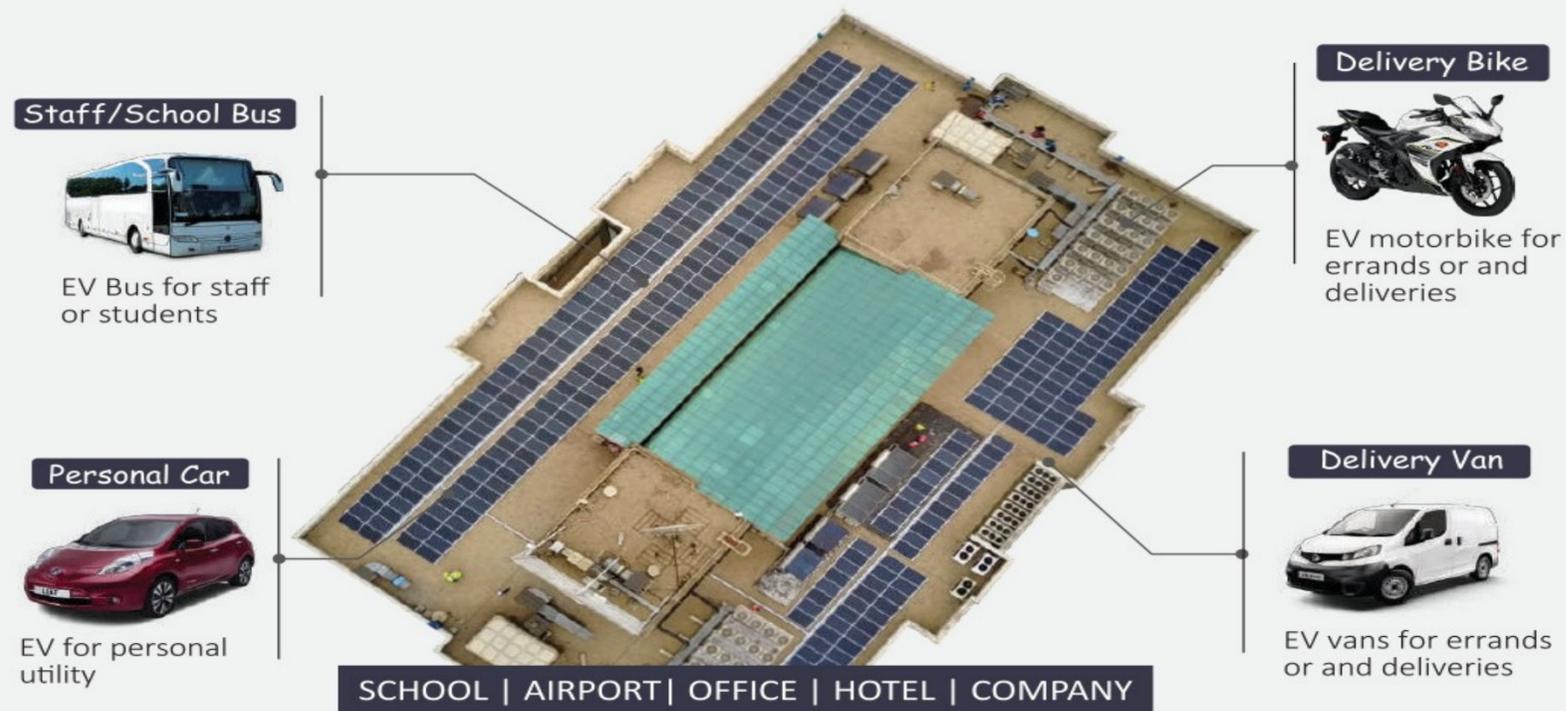
Heavy duty transport
such as tractors,
container loaders,
auxiliary and ground
power units, lavatory
and catering trucks

**Light commercial
vehicles** such as
ramp agent service,
airport maintained
transport within the
airport.

**Passenger service
vehicles** – buses and
minibuses
transporting
customers within the
airport, staff buses

Knights & Apps' proposed Solution for CO2 Emissions reduction and increase in CO2emission credits.

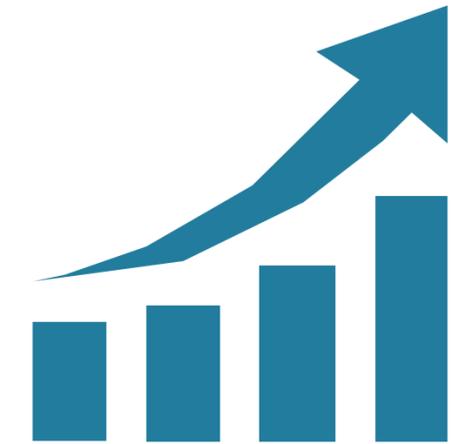
The Eco-Hub Concept



Revolutionizing Transport and Achieving Energy Security

We are proud to be pioneering the **ECO-HUB CONCEPT** that is truly revolutionizing the transport sector. Whether it is reducing maintenance costs, realizing huge fuel savings or meeting sustainability goals, it is clear that electric vehicles are a better choice for business and this concept is at the heart of that agenda.

In what ways will the Airports benefit from Knight & Apps' Eco Hub concept?



CO2 emission units

Affordable clean transport solutions

Captured Fleet electrification i.e. airports own and third-party fleet e.e.g buses, minibuses, taxi.

Renewable energy solutions

For day to day operations and commercial use with clean energy.

Smart Energy

Sustainable energy management systems for efficient energy use and energy savings.

Thank you!

Address:

Knights and Apps Ltd,
The Great Jubilee Centre, Karen,
Nairobi, Kenya.

Emails:

mobility@knightsandapps.com
romano@knightsandapps.com

Phone number:

+254 722 953 976

Websites:

www.knightsenergy.co.ke
www.drivelectric.co.ke