



CLINTON  
**CLIMATE**  
INITIATIVE

# African Airports and Climate Change

ACI African Airports Workshop  
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The William J. Clinton Foundation



## Initiatives

- Alliance for a Healthier Generation
- **Clinton Climate Initiative**
- Clinton Economic Opportunity Initiative
- Clinton Foundation HIV / AIDS Initiative
- Clinton Global Initiative
- Clinton-Giustra Sustainable Growth Initiative
- Clinton-Hunter Development Initiative

## Mission

- Make a difference in the fight against climate change in practical, measurable, and significant ways

## C40 Partnership

- Assist cities in implementing large scale projects that reduce energy consumption, use clean energy, & reduce greenhouse gas emissions

## Approach

- Stimulate the market
- Remove barriers
- Mobilize resources
- Share best practices
- Measure success

## Where We Work



# A Focus on Rollout



## Programs & Partners

### Programs

- Energy Efficiency Building Retrofit
- Transportation
- Shipping and Ports
- Aviation and Airports
- Solid Waste Management
- Water & Wastewater
- Clean Energy
- Developing Country Initiative
- Measurement Tools
- Purchasing Alliance

### Key Strategic Partnerships

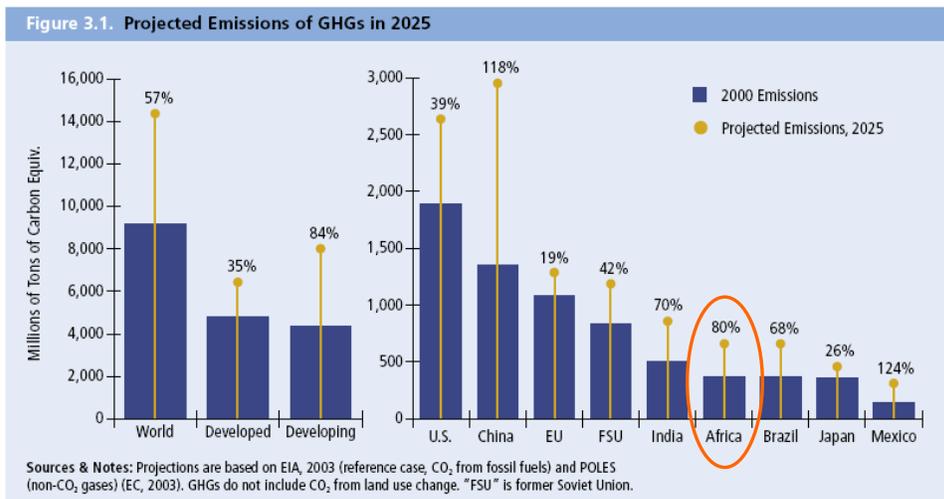
- Airports
- C40 Cities
- Technical
- Corporate
- City Agencies
- Industry Associations

- 2–3 % of *emissions*
- 3–8% of climate *impacts*
- Cities, airlines and airports: the power of the *hub*
- Over 18,000 commercial aircraft in service, operated by 1,300 airlines from 1,200 significant airports
- Traffic and emissions growing rapidly, especially in Africa.

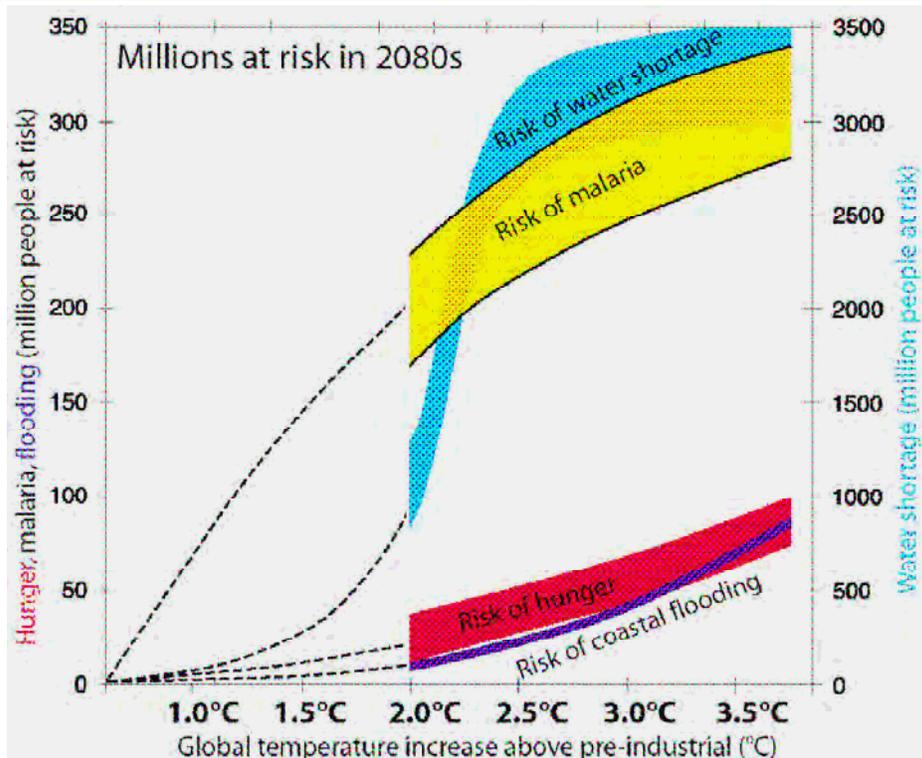


## Africa and Climate Change

- Years of emissions, predominantly from the North. All of Africa still accounts for less than 5%. Only one African nation (South Africa) ranks in the worst 25 nations in terms of CO<sub>2</sub> emissions.



- A small contributor, but one of the most vulnerable to the **effects** of climate change.



## The Urgency of Action Now

- African aviation vulnerable —
  - An international industry; Africa as a 'destination'; risk to passenger numbers
  - extreme weather & delays.
- Scientists now recommend an **80%** reduction in CO<sub>2</sub>e emissions, by **2050**.
  - And: reduce to **1990** emissions levels by **2020**.
  - This will help 'stabilize' atmospheric CO<sub>2</sub> concentrations such that warming is limited to 'only' 2 or 3 degrees Celsius.
- To get to this goal, we will need action in all sectors, across the world, along with international cooperation and transfers.

- New US leadership
  - European carbon trading scheme
  - Copenhagen and a post-2012 global pact
  - African action on **renewable energy** and in with **carbon financing**.
- 
- Strong drivers for energy efficiency and green airports:
    - Cost savings – energy, carbon, fuel
    - Energy security
    - Leadership and public image
    - ‘License to grow’

## “Climate Change” Projects

- Building Retrofits
- Lighting and Other Building Products
- Low Carbon Energy: Renewables & Cogeneration
- Waste
- Minimizing Aircraft Emissions
- Airports and Ground transportation

## What

- Airport offices, existing terminals, administrative offices, storage, and supporting airport facilities

## How

- CCI's Energy Efficiency Building Retrofit Program — energy performance contracting model
- Particular green products: Lighting Fixtures and Lamps (LED, High Pressure Sodium Vapor, Ceramic Metal Halide), Roofing and HVAC

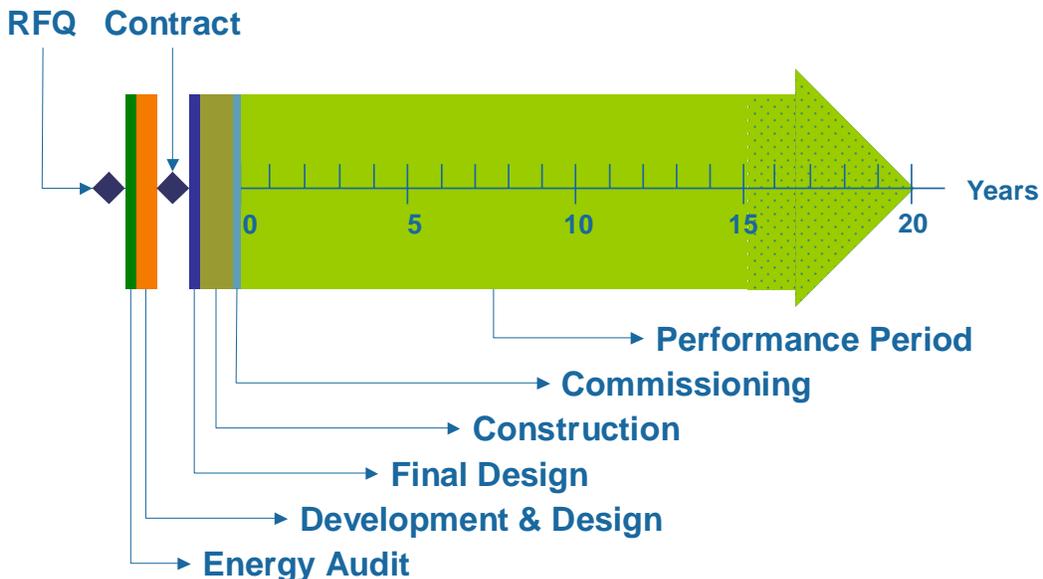
### EXAMPLE

#### *Seattle-Tacoma International Airport*

- Reduced energy consumption by ~20% from baseline
- Energy savings exceeding USD \$1.5 million per year



## Building Retrofit Program Feature: Performance Contracting





## EXAMPLE

- Munich Airport's solar installation
- AENA's energy program: wind, solar, cogen

## What

- Use of solar, geothermal, or cogeneration power to generate electricity to run facilities.

## How

- Install on-site energy generating sources
- Reduce costs and process time for renewables installation
- Combine with carbon CDM \$ and other funding

# Minimizing Aircraft Emissions

## What

- Programs to reduce emissions of aircraft and encourage cleaner, more efficient planes.

## How

- Fuel efficiency work worldwide – eg taxi policies, engine washing, gate power.
- Pilot project: increase number of gates supplying electricity and pre-conditioned air, by reducing prices, developing standardized models, sharing expertise, and engaging stakeholders.



## EXAMPLE

IATA's Go Green teams of experts providing advice on operational efficiencies

## What

- Airports as hubs for sustainable ground transportation
- Work with fleets that service the airport, public transit providers, transportation authorities

## How

- Work with airports and airlines to provide transportation links to city centers: transit as part of your air ticket
- Taxi improvement programs
- Bus efficiency improvement



## Next Steps

- Partnerships with airlines and airports
- Building a team to engage on the ground
- Providing resources — models, information, case studies, technical assistance, financing assistance
- Real projects — designing and implementing in conjunction with our partners
- Measurement tools