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# Financing of green airports, a development bank perspective

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# Agenda

1. **Overview of airport financing by development banks**
2. **Sustainable development considerations**
3. **Case studies of recent IDB airport operations**
4. **Future challenges**

**MONTREAL, CANADA, NOVEMBER 29-30, 2017**

# IDB Profile

## Overview

- Established in 1975 and headquartered in Jeddah, the Kingdom of Saudi Arabia
- Currently **57 member countries** (all developing countries) from the Middle East, Africa, the Asia Pacific region, South Asia, Europe and South America

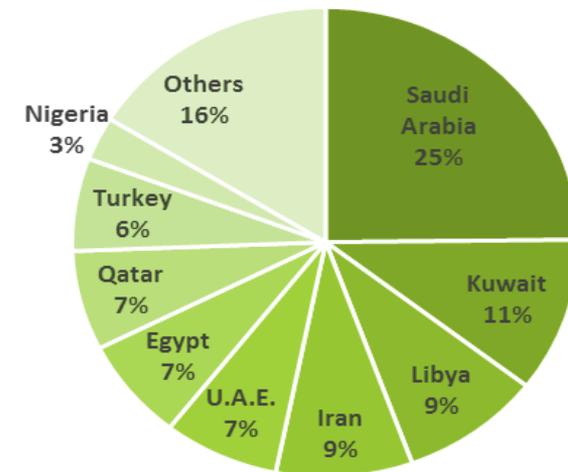
## IDB Priority Areas

- Human Development
- Agricultural and Rural Development and Food Security
- Infrastructure Development**
- Private Sector Development (ICD)
- Intra-Trade Among Member Countries (ITFC)
- Research and Development in Islamic Banking and Finance (IRTI)

## Key Financial Indicators

As of Year-End 2016 (USD billion)

Total Assets	22
Authorized Capital	150
Paid-up Capital	7.2



## Ratings

Moody's	Aaa
Fitch	AAA
Standard and Poor's	AAA



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# 1. Overview of development finance : key principles

- **Development bank:** *national or regional financial institution designed to provide medium- and long-term capital for productive investment, often accompanied by technical assistance, in developing countries*
- **Additionality:** *development banks play a key role as a catalyst, drawing private capital into long-term projects in countries and sectors where significant development results can be expected, but the market perceives high risks.*
- **Managing for development results:** *shift from focusing on inputs and immediate outputs (“how much money will I get, how much can I spend?”) to performance and achievement of outcomes and long-term impacts (what can I achieve with the money?)*



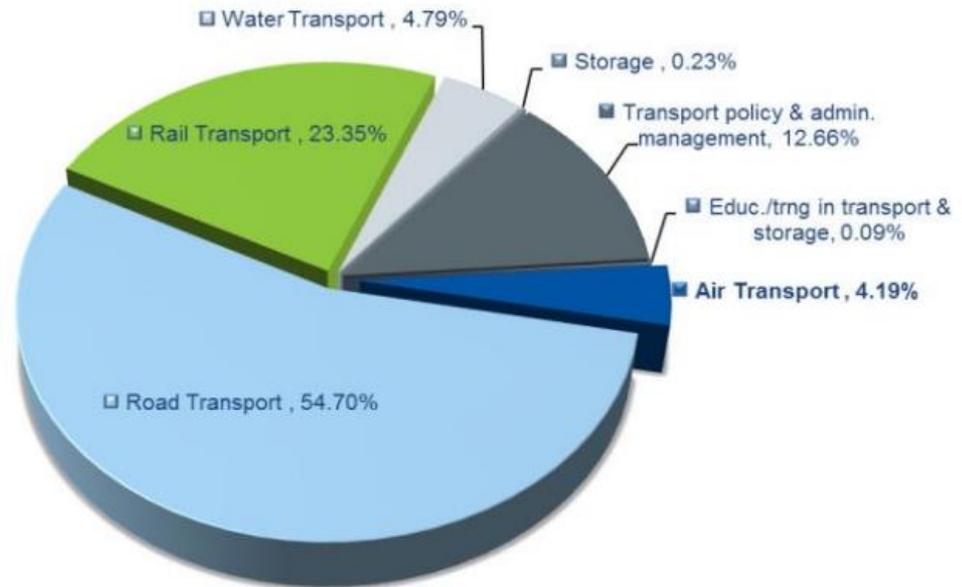
# 1. Overview of development finance : context

- Airports are mostly publicly owned (86% of 4,300 airports worldwide) and privatization of existing airports is challenging in developing countries
  - Financing options for new airports or airport extensions in developing countries
    - Government budget
    - Equity financing
    - Bank loans (commercial or government development banks)
    - Export credits
    - PPP transactions
    - Bilateral development finance
    - Multilateral development finance
- MDB interventions**
- 

# 1. Overview of development finance for airports: challenges

- Only 4% of Development finance in transport sector for air transport
- Development Data is scarce on access to airports and role of airports in international development
- Limited pipeline of “bankable” and mature projects ready for external financing (detailed design, safeguards, institutional set-up, etc.)

ODA Donors contribution to Transport Sector 2005 - 2013



Source: ICAO, 2016



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## Infrastructure Financing Gap in **Numbers**

- 1.2 billion people are without electricity,
- 663 million people lack improved drinking water sources,
- 2.4 billion people lack improved sanitation facilities, and
- 1 billion people live more than 2 km from an all-weather road.
- 55 percent of emissions are directly or indirectly attributable to infrastructure.



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## 2. Sustainable development considerations: context

### GLOBAL OBJECTIVES



#### UNIVERSAL ACCESS

Ensure for all equitable access to economic and social opportunities by 2030



#### EFFICIENCY

Increase the efficiency of transport systems by 2030



#### SAFETY

Improve safety of mobility across transport modes



#### GREEN

Shift transport systems to low polluting (GHG/air/noise) and climate resilient path

#### Sustainable Mobility for All (Sum4ALL):

More than 50 international organizations agreeing on a common vision for transforming the sector (including ISDB and ICAO !)

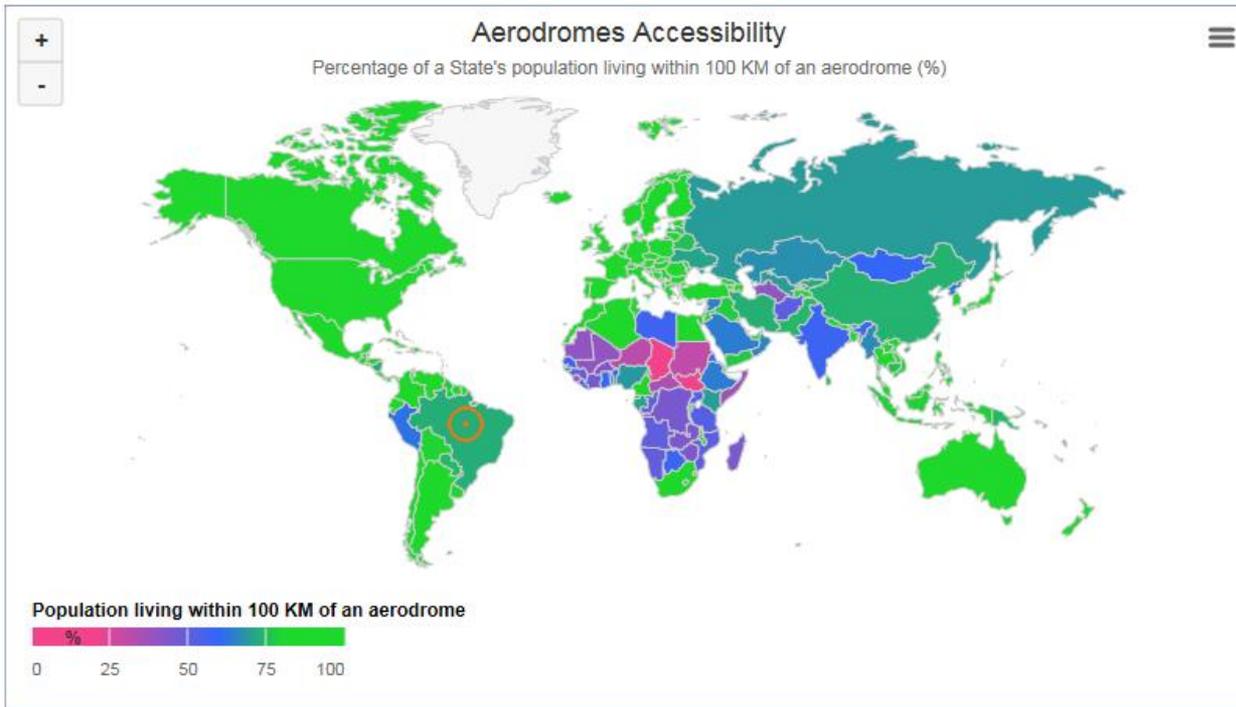


#### SDGs (2030)

Transport directly reflected in targets SDG 3.6, SDG 9.1 and SDG 11.2 and indirectly linked to many others

**RIO +20 (2012)** US\$ 175 Billion for sustainable transport by 2022

## 2. Sustainable development considerations: SuM4ALL targets



**UNIVERSAL ACCESS**

% of world population who live within 100 km of an international airport

4.1 & 4.2 Quality of air transport  
5.2 Passenger volume by air



**SYSTEM EFFICIENCY**

4. Air & Linear Shipping connectivity  
5.1 & 5.2 Air Freight & mail volumes



**SAFETY**

4.1 Number of Air fatalities  
4.2 Implementation of safety plans



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## 2. Sustainable development considerations: SuM4ALL targets

### **Selected Indicators include:**

6.3: Share of alternative fuels in transport

6.5: Modal share of freight transport (by rail, water, air, road),

7.1: Incidents/climate change related disasters/losses/... to transport service

7.4: % of new transport infrastructure investments designed to withstand extreme climate conditions

8.1: Emissions of PM10, PM2.5, black carbon, NOx, SOx, and VOCs from passenger and freight vehicles

9.4: Percent change in average noise outside agglomerations



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## 2. Sustainable development considerations: EIA

- Paris Declaration on Aid effectiveness (2005):  
Promoting a harmonised approach to environmental assessments (EIA)
- Environmental safeguards : prevent and mitigate undue harm to people and their environment in the development process
- IDB approach: require and review approved EIA for every projects but rely on national environmental agencies for the environmental safeguards



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### 3. Case studies of recent IDB airport operations

- Aircraft financing (Sovereign) :
  - Lease Financing in 2013 of the third and fourth aircraft Boeing-767-300ER for Uzbekistan Airways (US\$ 170 million).
- Airport financing (Sovereign):
  - Financing by IDB (US\$ 100 million) and Arab donors (BADEA, SFD, KFD and OFID) of the Donsin airport platform in Burkina Faso
  - Financing by IDB (US\$ 30 million) of equipment and construction works for the new freight terminal of the Abidjan airport in Cote d'Ivoire
  - Financing by IDB (US\$ 20 million) with OFID (US\$ 15 million) of the expansion works for the Bamako Airport in Mali
- Airport financing (PPP)
  - Queen Alia Airport in Jordan (see next): US\$ 100 million
  - Hajj Terminal in Jeddah (see next): US\$ 105 million
  - Aeroport International Blaise Diagne (see next): US\$ 70 million

## Case Study 1: Queen Alia Airport, Jordan

- 25 year BOT concession
- 12 mln Passenger Capacity
- Project cost: USD 681 mln
- Financing:
  - Equity: USD 111 mln
  - IDB: USD 100 mln
  - IFC: USD 100 mln
- Repayment period: 18 years



- Full Completion: December 2015
- An innovative design with 10 MW Solar Park adjacent to air-side of the airport to meet 50% of energy needs
- 2016 Airport Service Quality (ASQ) awards (1<sup>st</sup> in Middle East and 3<sup>rd</sup> worldwide)
- 7.4Mn passengers in 2016 up from 4 Mn in 2007
- QAIA has become Airport Carbon Accredited, streamlining its activities related to environmental protection

## Case Study 2: Hajj terminal, Jeddah, KSA

- 20 year BTO concession
- Project cost: USD315 mln
- Financed with a mix of debt/equity in the ratio of 80:20 and pre completion revenues
- Repayment period: 10.75 years
- Sponsor: SBG



- Terminal dedicated to Hajj and Umrah pilgrims at Jeddah
- Project opened in 2011
- Innovative open-air tent structure for comfort of pilgrims despite high external temperatures
- 3 million pilgrims annually



## Case Study 3: Aeroport Blaise Diagne, Senegal

- 30 year BOT concession
- 3 mln Passenger Capacity
- Project cost: € 698 mln
- Main Financiers:
- Equity: € 268 mln
  - IDB : € 90 mln
  - AfDB: € 70 mln
  - AFD : € 70 mln
  - BOAD: € 30 mln
  - SFD : \$ 100 mln
  - IDC: € 50 mln
  - ICF : € 30 mln
- Repayment period: 18 years



- Operator: LAS (Limak-AIBD-Summa)
- EPC Contractor: Summa and Limak
- Planned date of Completion: 7 Dec 2017
- Environmental and Social Impact Assessment issued in February 2010 and environmental compliance certificate issued by the DEEC in April 2010.
- Budget for ESMP : USD 2,657,910 USD



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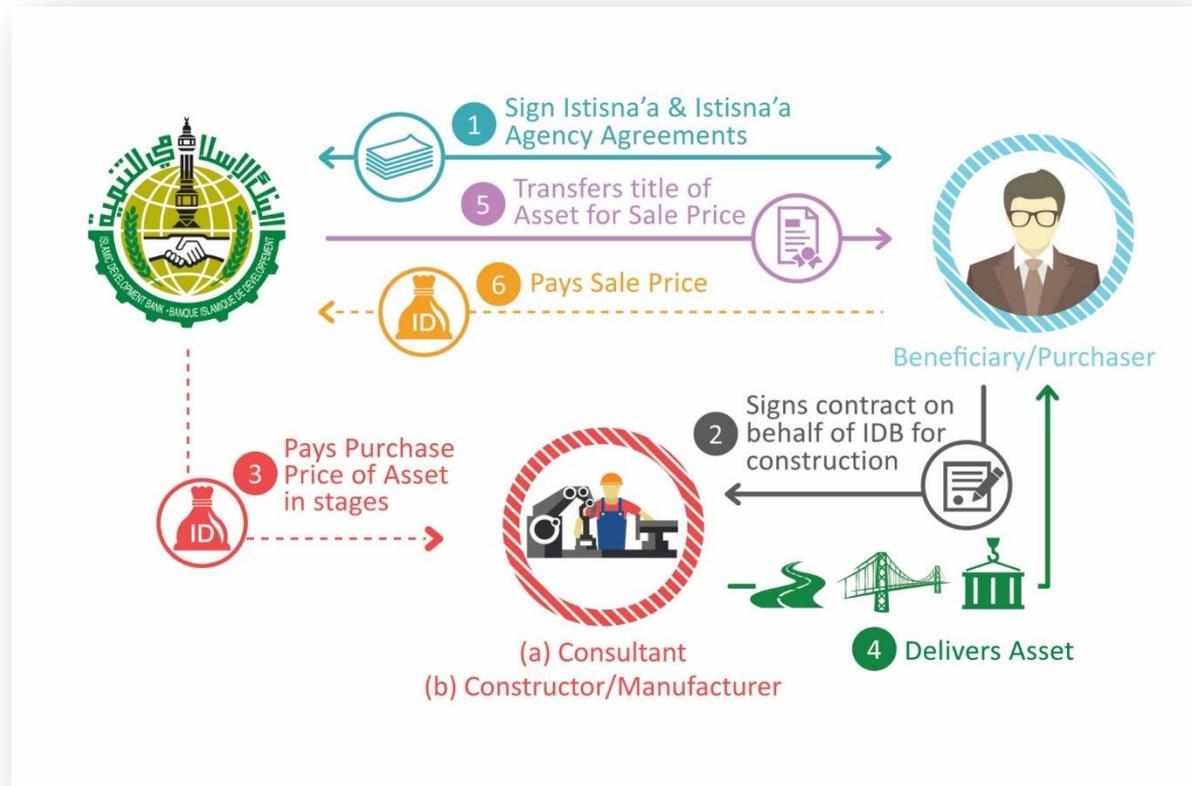


## 4. Future challenges

- Airport Carbon Accreditation initiative to be streamlined in all MDB financed projects? Carbon trade?
- Growing NGO and CSO activism against greenfield airport projects or major infrastructure expansions
- Trade-off between equity (access to infrastructure for developing countries) and carbon footprint
- LCC pushing for rapid expansion in Developing countries => Airports of “lower standards” coming?

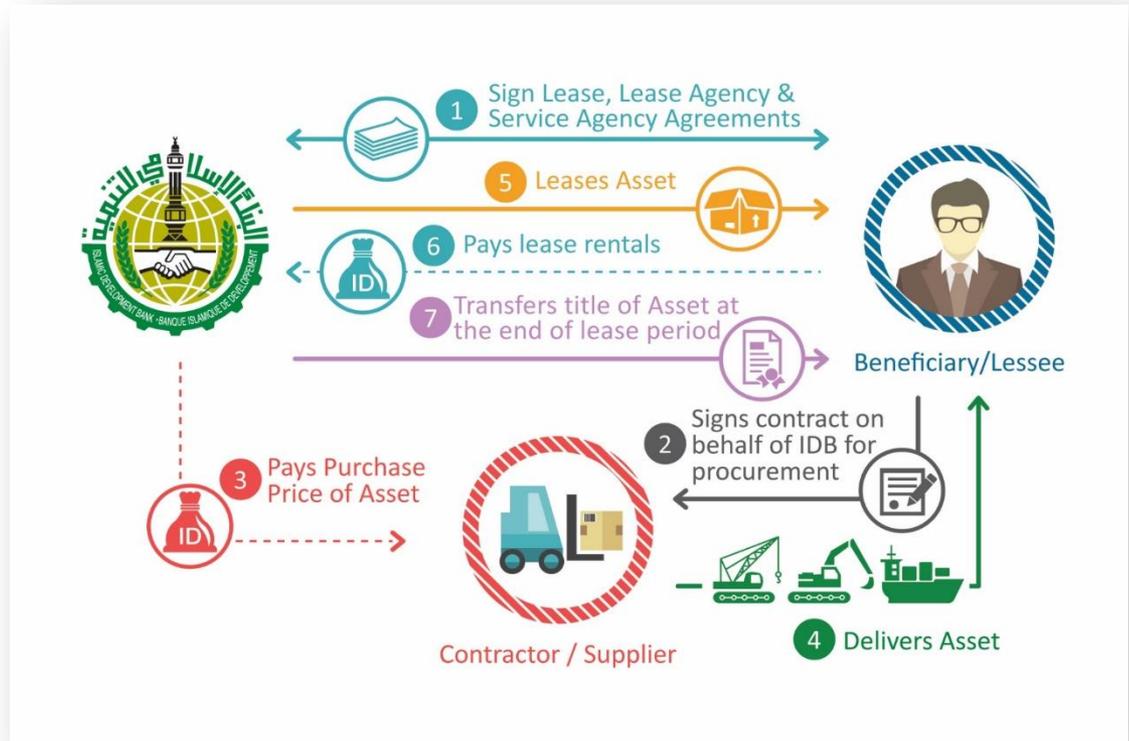
## Annex: Istisna'a financing structure

- **Istisna'a financing (Construction)**  
A sale of asset is transacted before it comes into existence. Purchaser (SPV) orders a manufacturer (bank) a specific asset. Upon construction, bank delivers the asset at pre-agreed price, which is repaid by SPV in instalments.
- Bank appoints the purchaser (SPV) as its agent who gets the asset constructed by EPC contractor. Once asset is constructed and accepted by the purchaser, Bank transfers the title of the asset to the purchaser (SPV).
- The SPV pays the sale price of the asset in deferred payments.
- Since the sale price has to be known beforehand, Istisna'a is fixed repayment type



# Annex: Ijara(lease) financing structure

- **Ijara financing (lease)**  
Asset owner (bank) sells a definite usufruct of the asset in exchange for a periodic rent.
- Bank purchases an asset and transfers the 'right to use' (usufruct) to the borrower (SPV) for a periodic rental payment throughout the lease life (loan life).
- At the end of lease period (loan life), the bank transfers the asset to the borrower (SPV) as gift.
- For example, in an airport, the bank will be the owner of main E&M equipment and leases those to the SPV.





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Thank you for your attention

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