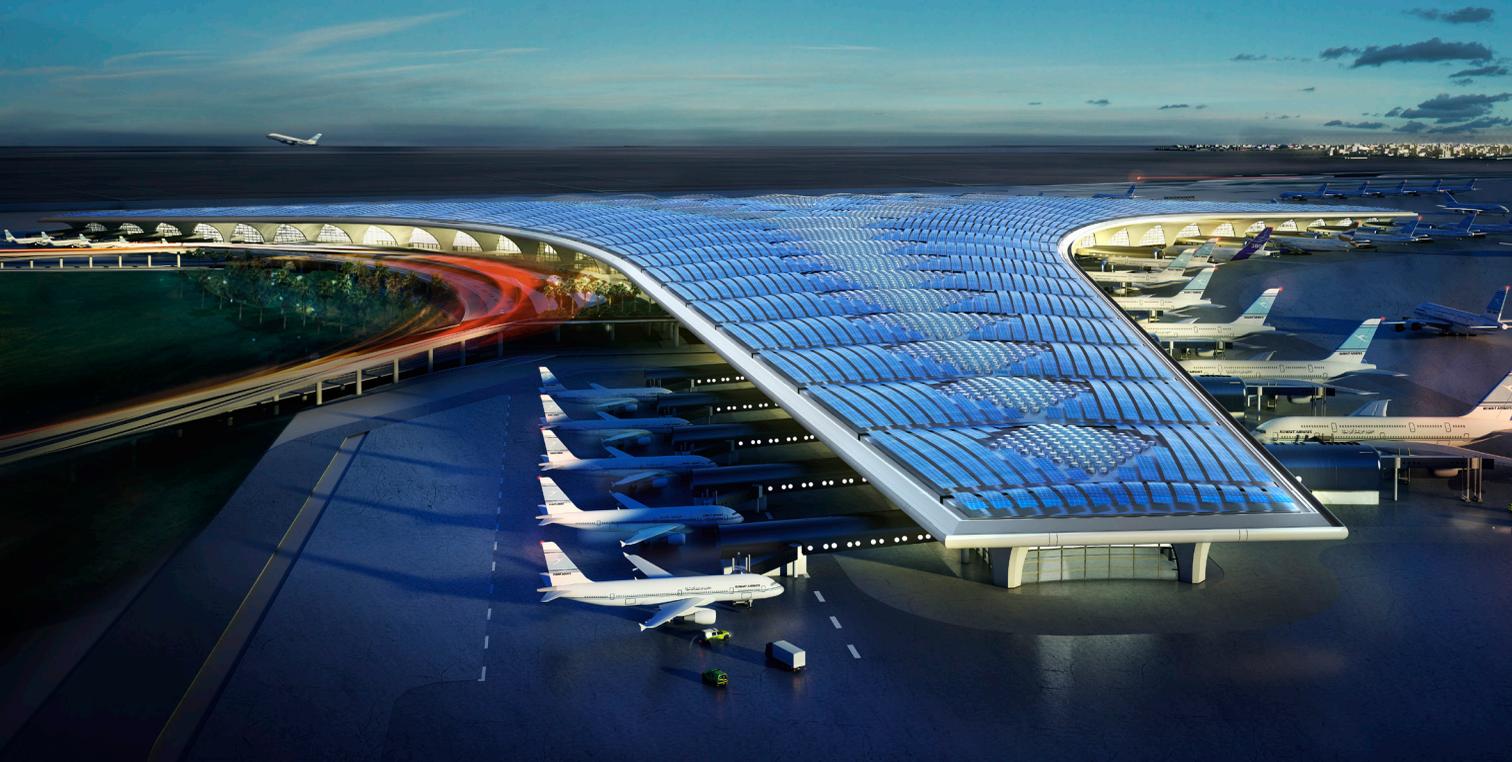


# مطار الكويت الدولي مبنى الركاب 2

## Kuwait International Airport Terminal II



مطار الكويت الدولي مبنى الركاب الجديد  
**Kuwait International Airport New Terminal**





سمو الشيخ/ نواف الأحمد الجابر الصباح  
ولي العهد

His Highness The Crown Prince  
Sheikh Nawaf Al-Ahmed Al-Jaber Al-Sabah



صاحب السمو  
الشيخ/ صباح الأحمد الجابر الصباح

His Highness The Amir  
Sheikh Sabah Al-Ahmed Al-Jaber Al-Sabah



سمو الشيخ/ جابر المبارك الحمد الصباح  
رئيس مجلس الوزراء

His Highness The Prime Minister  
Sheikh Jaber Mubarak Al-Hamad Al-Sabah

The design of Terminal (2) consists of a **Trefoil plan**, comprising **three symmetric wings**. Each side spans **1.2 Km** and all extend from a dramatic **25-metre-high central space**.

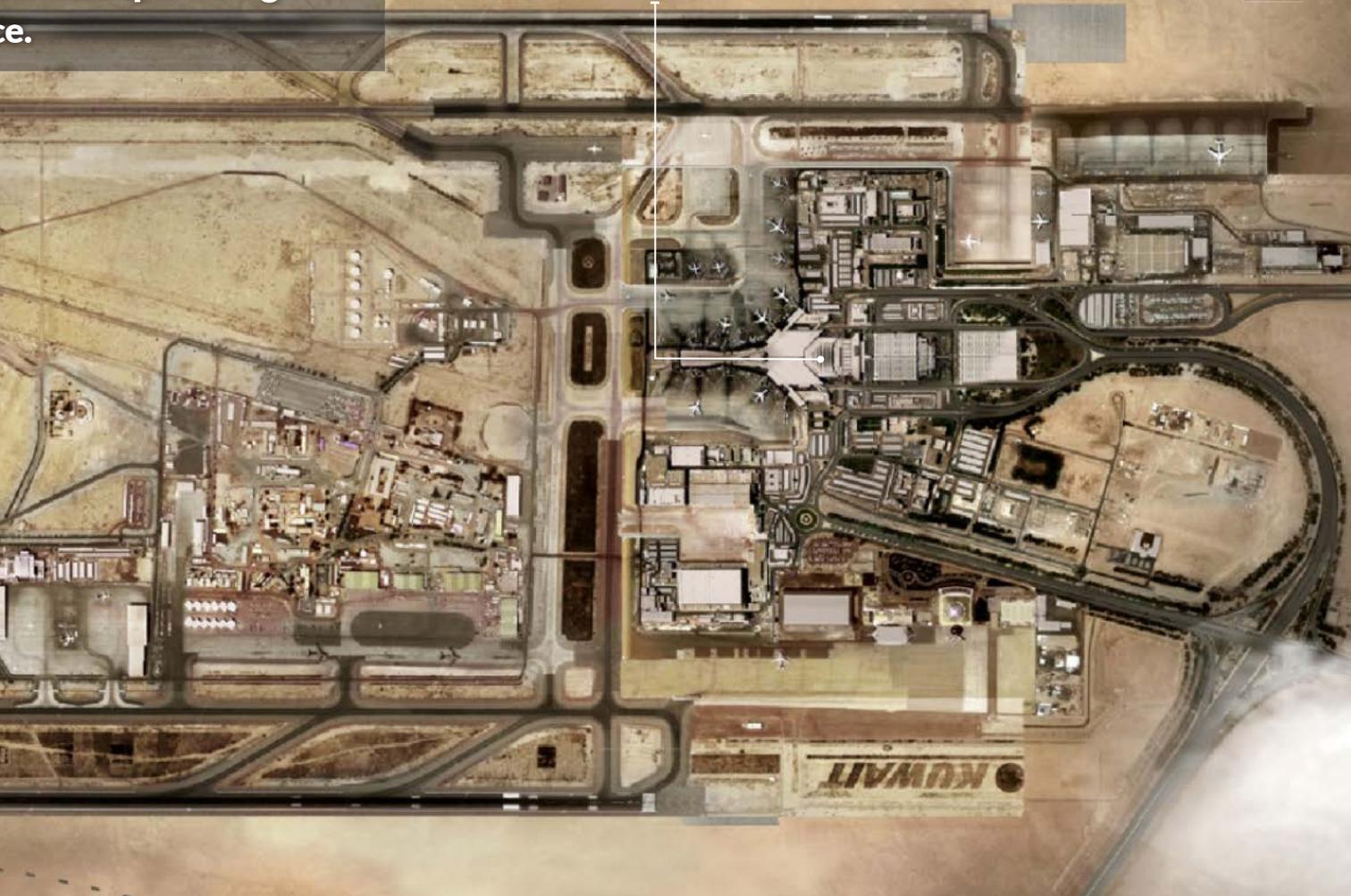


The first phase will accommodate up to 25 million passengers per year

ins of departure gates.

ce.

Existing Terminal



**KUWAIT**

# Facts & Figures

## Location:

Sabhan, Kuwait.

## General statistics:

- First phase will accommodate 25 MAP (million annual passengers).
- Further expansion will enable the Gulf's new regional hub to serve up 50 million MAP.

## Site Area:

The total area for the new passenger terminal site is approximately 6.8 million m<sup>2</sup>.

The built up area of the terminal building is exceeding 700,000 m<sup>2</sup>.

## Building Footprint:

The terminal building footprint exceeds 150,000 m<sup>2</sup>.

## Building Height:

Up to 39 metres.

## Number of Storeys:

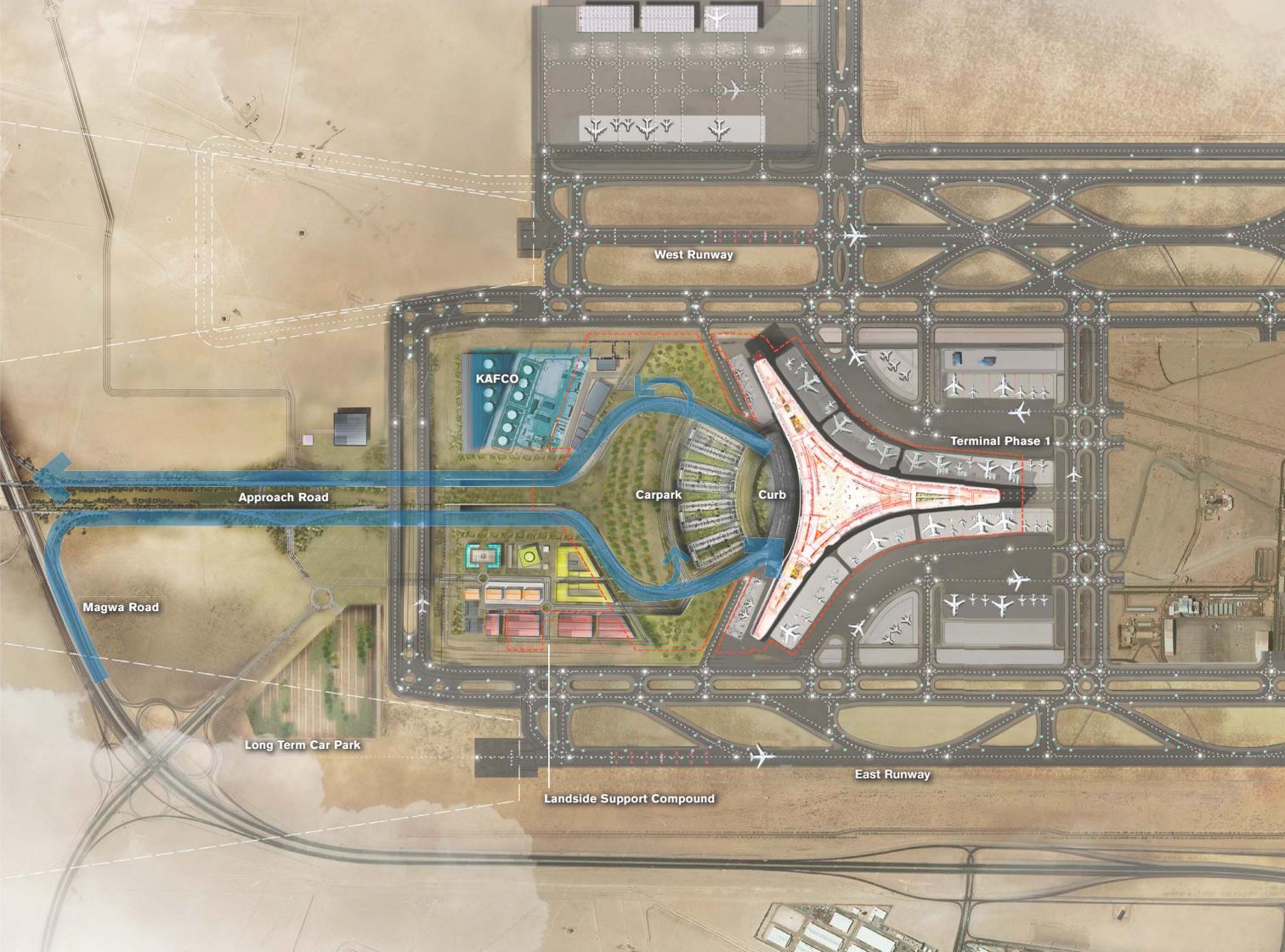
The terminal building has 4 levels above ground and one underground.

## Sustainability:

- Striving to attain LEED 'Gold' status.
- The concrete structure provides thermal mass and the roof incorporates a large expanse of photovoltaic panels to harvest solar energy.

## Check in and baggage handling:

- 180 Check in desks.
- 32 Baggage drop-off counters.
- Approximately 6 kilometres of baggage conveyors.
- Approximately 1.5 kilometres of high speed baggage sorters.
- Integrated baggage system incorporating screening, dynamic storage, and sortation.



West Runway

KAFCO

Approach Road

Magwa Road

Carpark

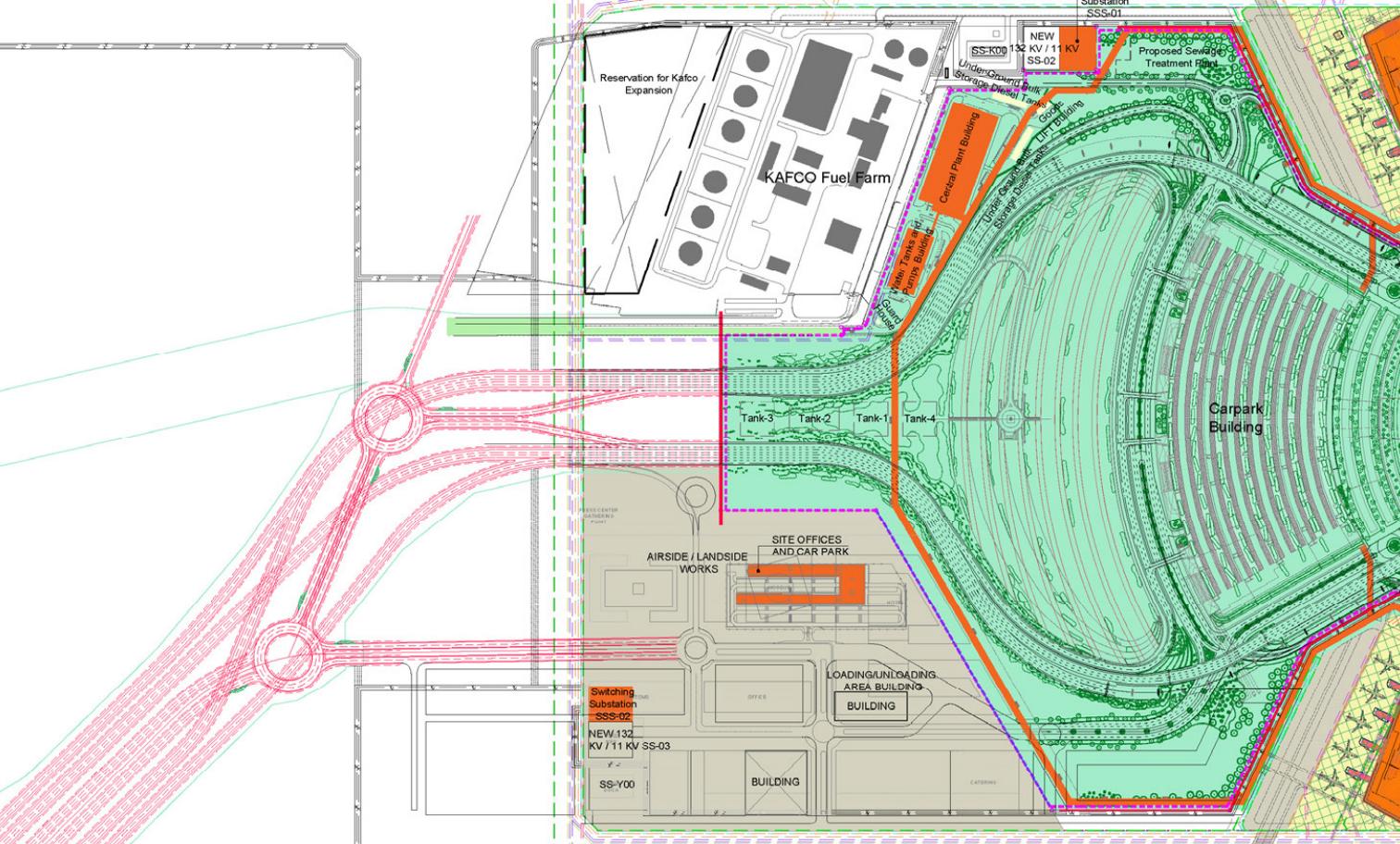
Curb

Terminal Phase 1

Long Term Car Park

Landside Support Compound

East Runway



**Package 1**

The New Passengers Building (II) and Tunnels.



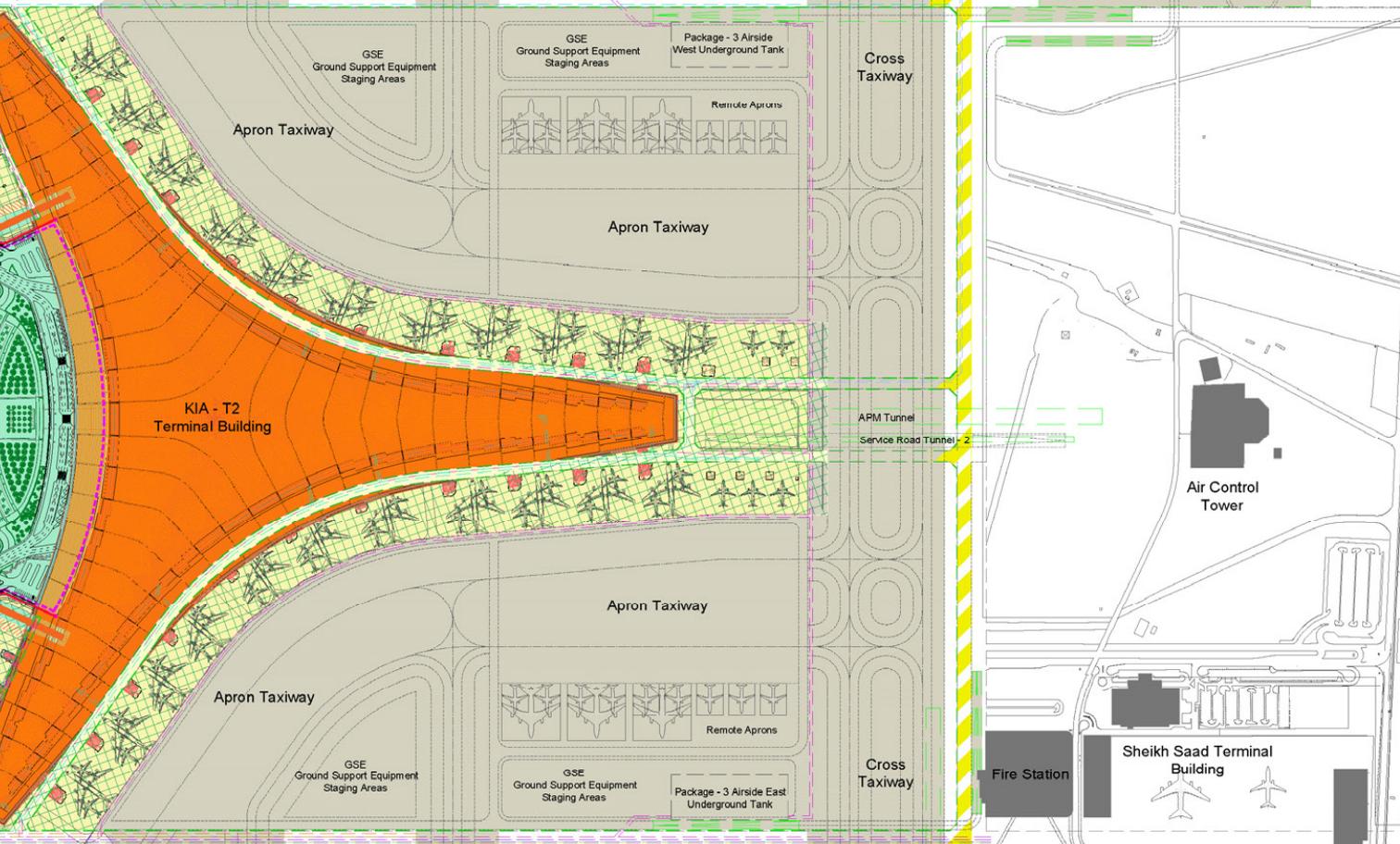
**Package 2**

Service Buildings, Roads Leading to the New Terminal (II) and Car Park.



**Package 3**

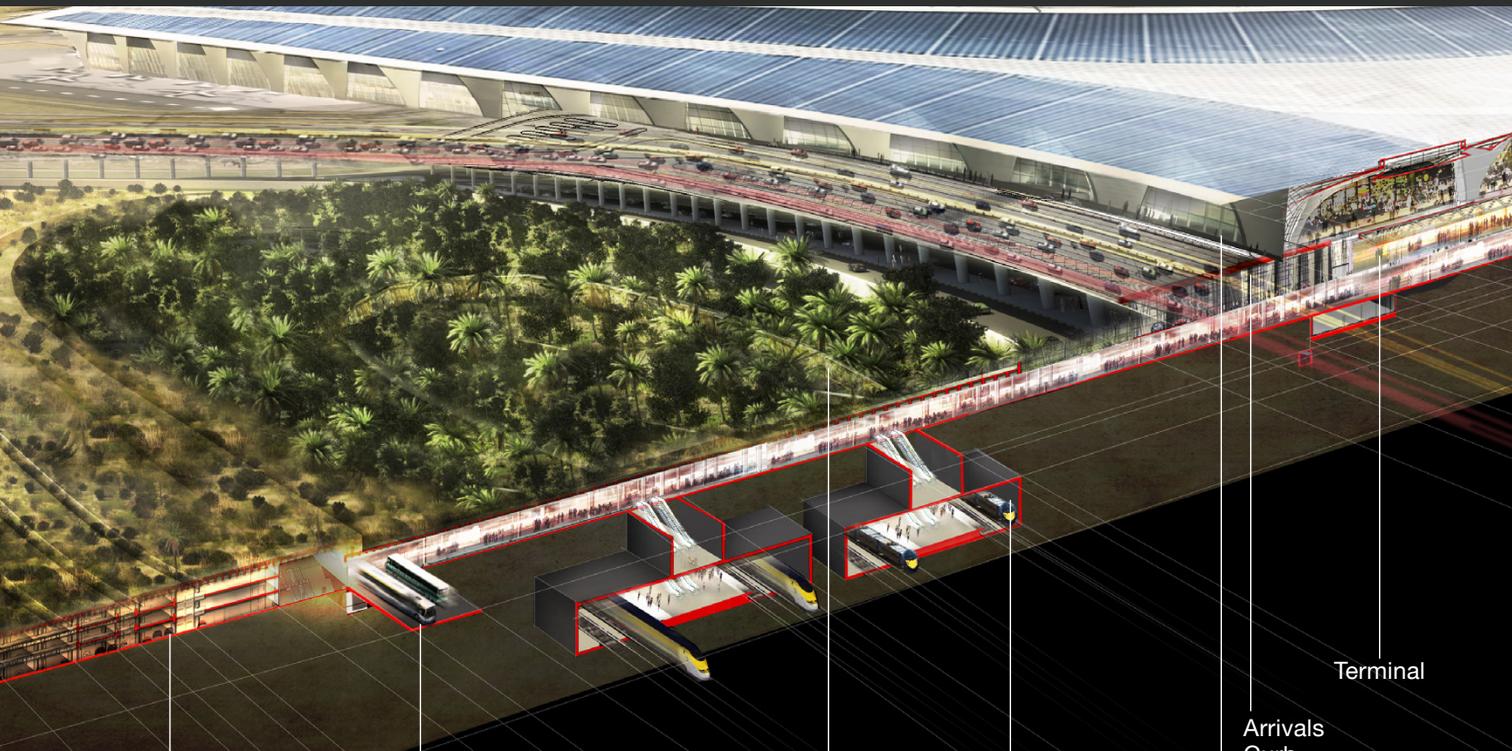
Aircrafts' Apron and Taxiways; and Service Buildings for the New Passenger Terminal Building (II).





A **comparison** of the length of **one side of Terminal (2)** to **Avenues**, Kuwait.

**Multi modal transport** hub for ease of transfer between different **modes of transport** as well as **terminal building**.



Visitors Car Park  
Capacity 4,700 Cars

Bus and Coach  
Station

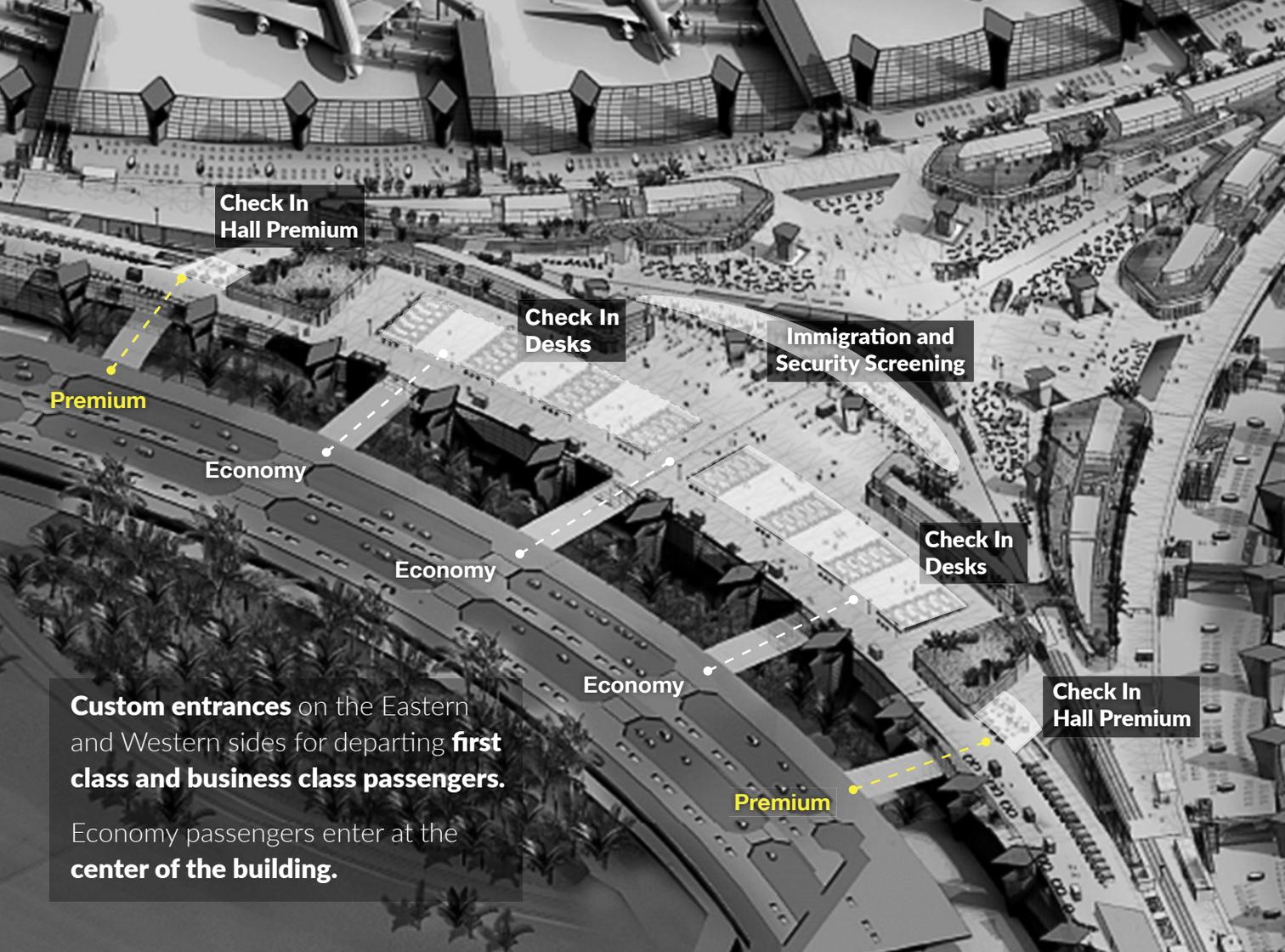
Oasis

Metro  
Station

Arrivals  
Curb

Departures  
Curb

Terminal



Check In  
Hall Premium

Premium

Economy

Check In  
Desks

Immigration and  
Security Screening

Check In  
Desks

Economy

Economy

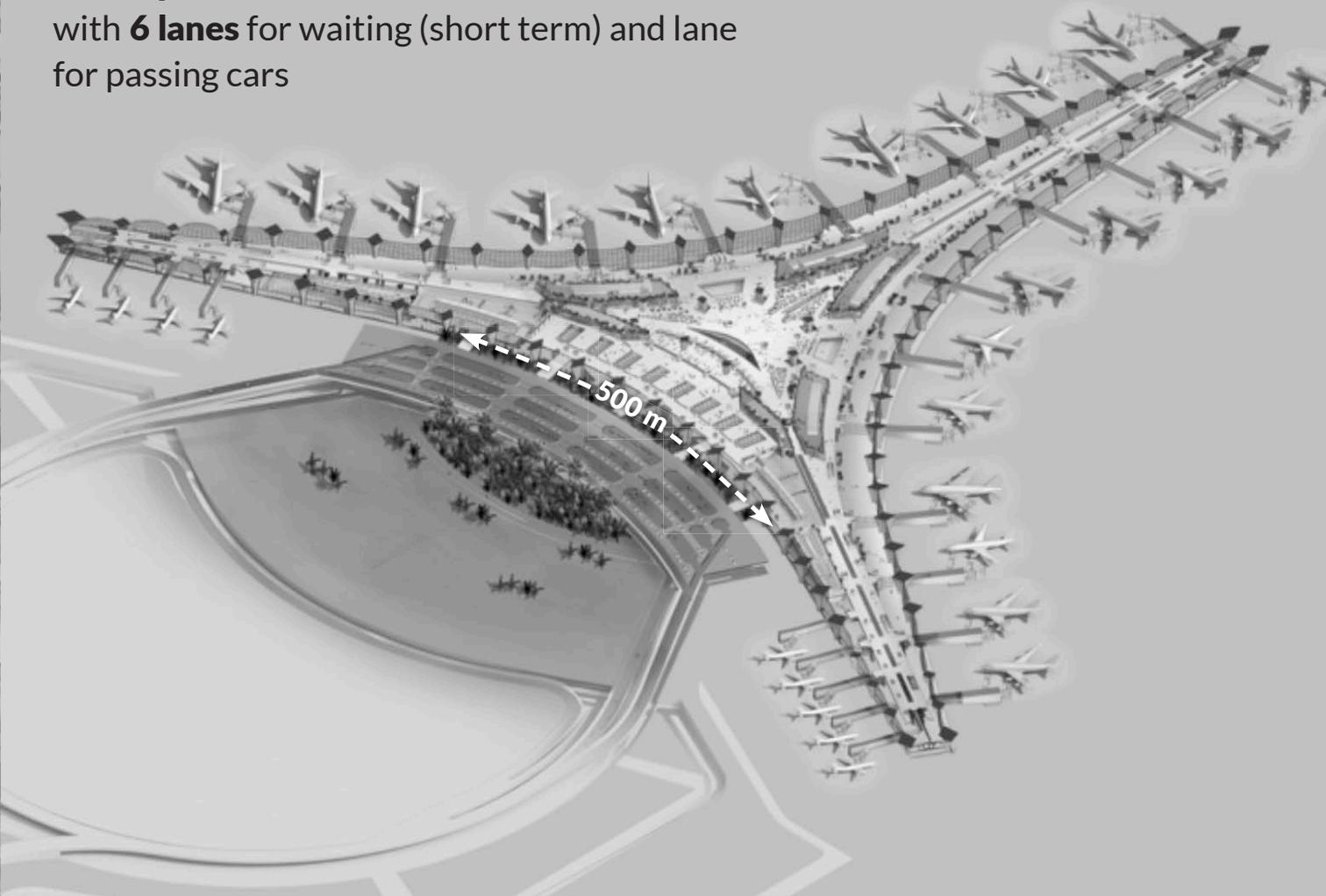
Check In  
Hall Premium

Premium

**Custom entrances** on the Eastern and Western sides for departing **first class and business class passengers.**

Economy passengers enter at the **center of the building.**

The **departure** curb extends **over 500 meters** with **6 lanes** for waiting (short term) and lane for passing cars



# Interior Design

Premium Check In Desk- Back  
Axonometric

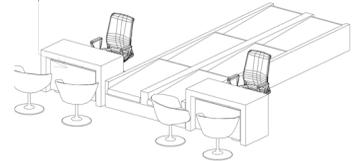
Materials have been chosen for their suitability and environmental performance and furniture has been selected on the basis of functionality, quality, aesthetics and durability.

Individual pieces cater to the specific needs of users in each area. The size of groups, social interactions and age of users have all been considered and have informed the configuration of loose elements.

Color has also been introduced to enliven the materials palette. Staff furniture and office layouts have been organized to ensure comfort and productivity, while maintaining a sense of visual continuity with the rest of the building.

Premium Check In Desk- Front  
Axonometric

Body Coloured MDF



Flat Grain Palm

Body Coloured MDF



Economy Passengers Check-In Desk Island  
Axonometric



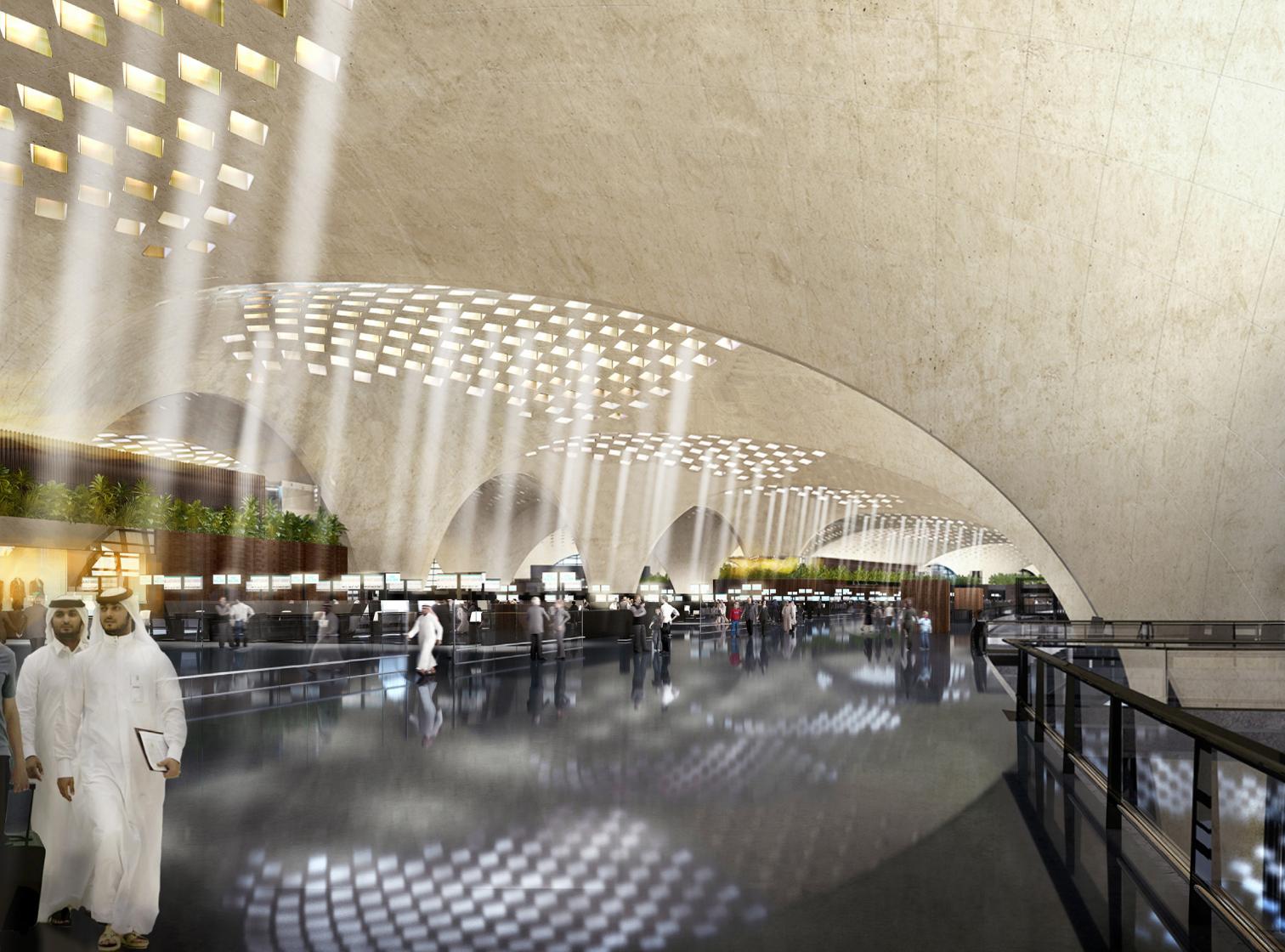
**180 check in counters**

# First Class Check in

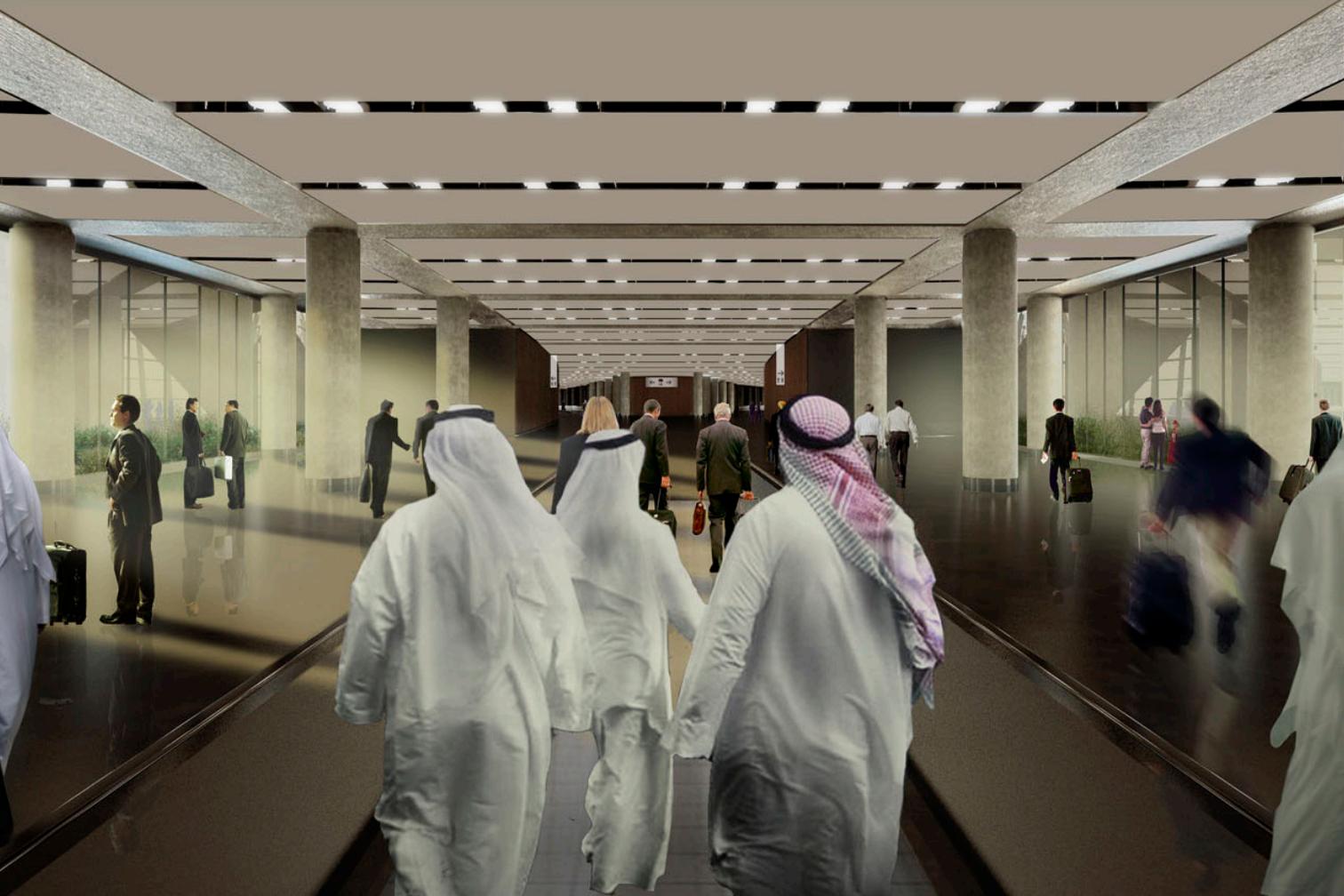


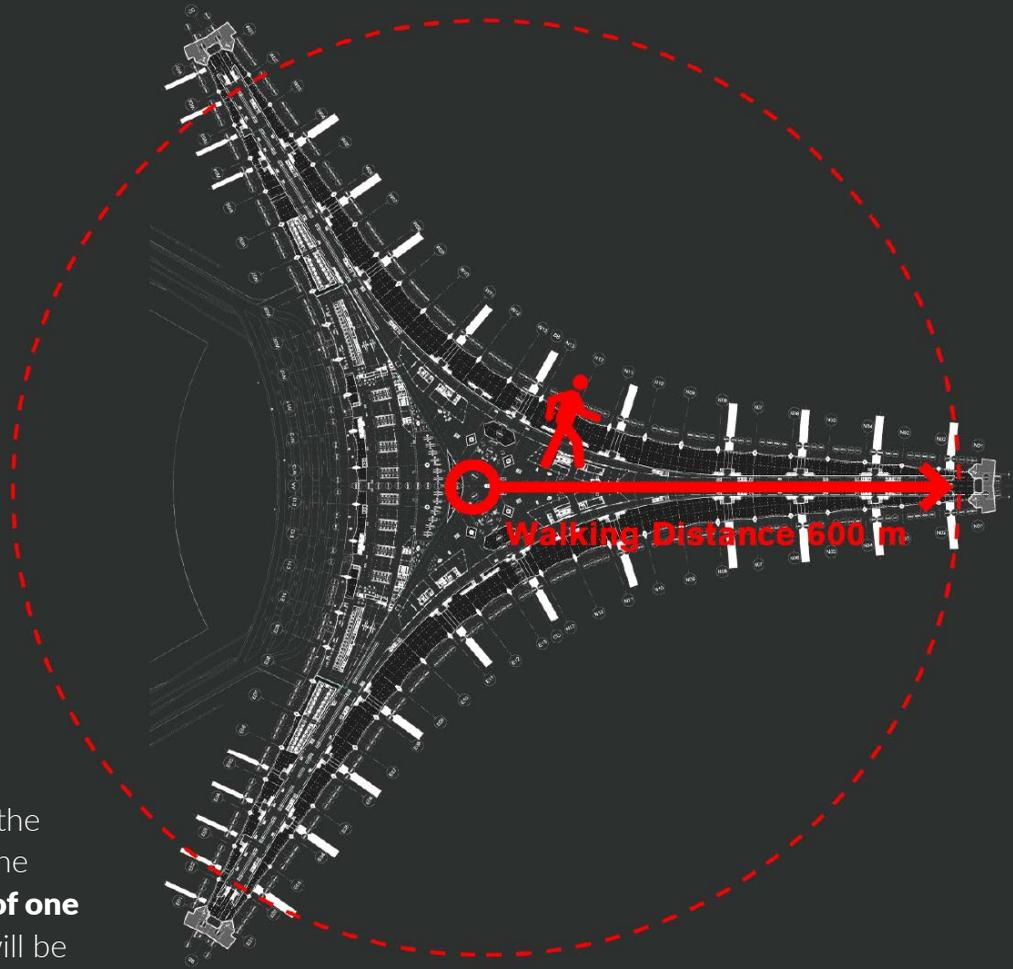
**21 Gates** for **MARS aircraft stands**,  
capable of accommodating the **Airbus A380**  
and **9 dedicated code C gates**





# Arrivals Corridors





The **walking distance** for the passengers walking from the **central space to the end of one of the departures gates** will be **600 m**.



Cantilever Shading



Natural Flooring



Bamboo



Thermal Mass



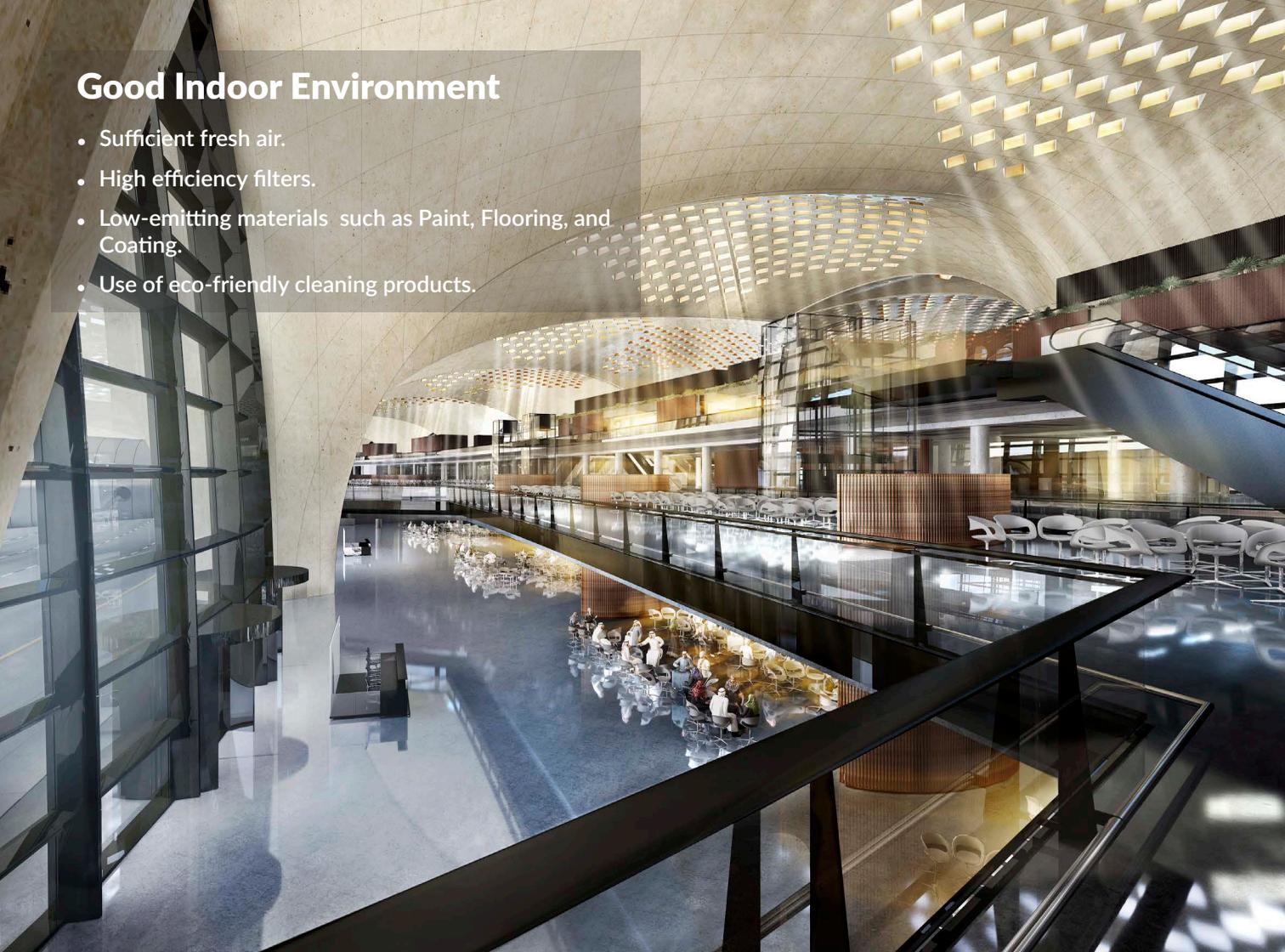
**Targeting  
LEED GOLD**



Natural Daylight

# Good Indoor Environment

- Sufficient fresh air.
- High efficiency filters.
- Low-emitting materials such as Paint, Flooring, and Coating.
- Use of eco-friendly cleaning products.



# Skylight

The roof top incorporates 8,000 sky lights.

This serves three functions:

- Introduce daylight.
- Incorporate artificial luminaires.
- Act as acoustic traps to improve sound quality.

The funnels are clad in gold colored metallic sheets, which reflect the sun's rays.



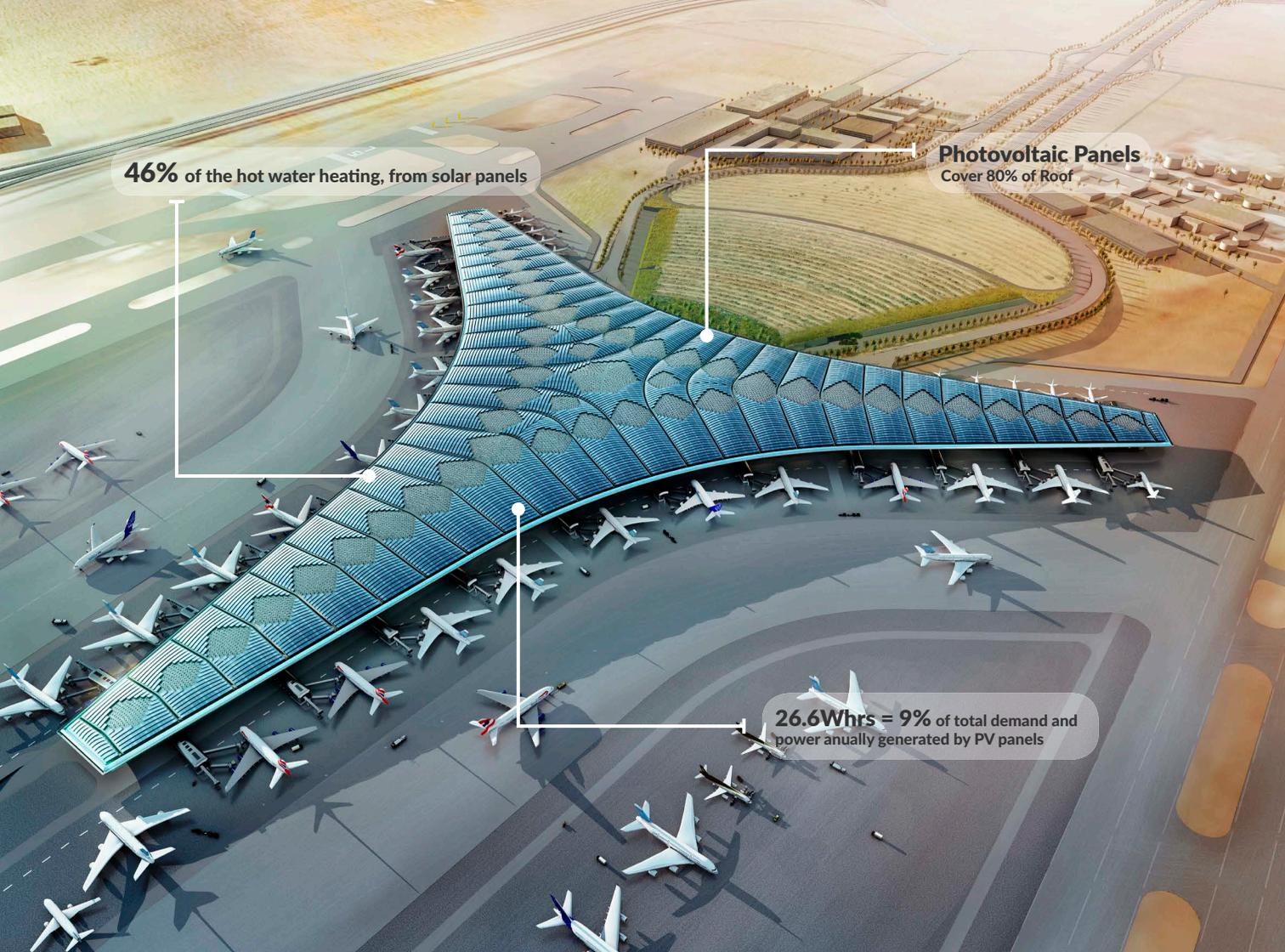
# Sustainable Systems

- Use of photovoltaic daylight sensitive illumination and shading.
- Motion detection lighting systems.
- Solar power system.
- Building Automation System.
- Chiller Plant Manager System.
- Grey water treatment system.
- Outdoor Air Delivery Monitoring System.
- Free cooling at outdoor ambient air temperature below 22°C.
- Energy Measurement System.
- HVAC Energy Recovery from exhaust air.
- Displacement ventilation system.
- Variable air volume system.
- Building pressurization system.



# Electro-Mechanical Systems

- The energy saving criteria included in the design reduces the annual energy consumption used for cooling by 36% compared to traditional buildings.
- The terminal consumes 294 m<sup>3</sup> of hot water per day, and rooftop solar panels generate 46% of the energy needed to heat the water.
- The wastewater from the laundries is collected and treated to provide 30% of the water needed for the toilets.
- The water consumption of the terminal is equivalent to 1325 m<sup>3</sup> per day, with a capacity of 25 million passengers per year. Through the pool of water consumed in the washbasins in the bathrooms and the water from the condensate, the water consumption was reduced by 50% inside the building.



**46%** of the hot water heating, from solar panels

**Photovoltaic Panels**  
Cover 80% of Roof

**26.6Whrs = 9%** of total demand and power annually generated by PV panels



Card reader  
access control



Security Management  
Information System (SMIS)



Airport Operational Database  
(AODB)



Building Management System  
(BMS)



License Plate  
Recognition

# STATE OF AIRPORT



Biometric identity  
verification



Video Surveillance  
System (VSS)



Intelligent Video  
Analytics



Fire Alarm  
System (FAS)



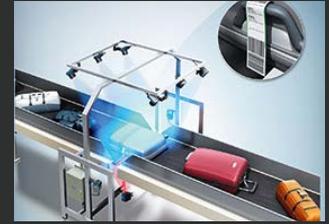
Public Announcement System (PAS)



Dynamic Display System (DDS)

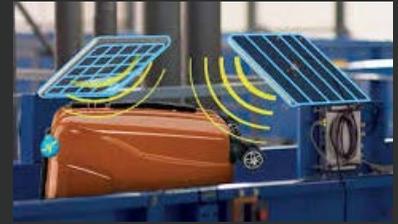


Telephone System



Baggage Handling System (BHS)

# THE ART SYSTEMS



Baggage Tracking



Check-in kiosks



Check-in kiosks



Flight Information Display System (FIDS)



[www.mpw-t2.com](http://www.mpw-t2.com)

Instagram: @mpw\_t2

Consultants

**Foster + Partners** | **Gulf Consult**

Sub Consultants

**ARUP** | **NACO** | **KEO**

Contractor

**Limak**

End User



**Directorate General  
of Civil Aviation**