

IAPH Award 2023

Sustainable Port Development with  
State-of-the-art facilities

# Sustainable Port Development at Khalifa Port



مجموعة موانئ أبوظبي  
AD PORTS GROUP

# INTRODUCTION



The Ports Cluster, part of AD Ports Group, owns and operates more than 11 ports and terminals in the UAE and internationally, with an aim of facilitating trade and building capacity whilst connecting Abu Dhabi globally.

The cluster is focused on achieving sustainable growth, forging partnerships with local and global market leaders, which include but not limited to ADNOC, COSCO SHIPPING Ports, CMA CGM Group, MSC Shipping, and Autoterminal Barcelona, with the goal of diversifying and expanding capacity to meet the growing and diverse needs of customers while solidifying Abu Dhabi as a global trade and logistics hub.

Our 11 ports offer a wide range of commercial and leisure services. We have integrated several innovative and efficient technologies into our port operations, thus making them some of the region's most sustainable and technologically advanced ports.







# CONTRIBUTION TO ECONOMY





# DEVELOPING CAPACITY ACROSS THE UAE

Lesser Tunb

Greater Tunb



Abu Musa

## Khalifa Port

One of the world's fastest growing ports

Deepwater port – 18.5m

3 Container, Bulk & GC & Ro-Ro, liquid terminals

AED4 billion expansion underway

Nahwa (UAE)

## Fujairah Terminals

35-year concession with Port of Fujairah

AED1 billion investment

1 million TEU a year  
vessels of up to 9,000 TEU

## Shahama Port

## Musaffah Port

Linked to Musaffah Channel  
Draft of 8m & several quays

## Zayed Port

Abu Dhabi's main port for 40 years

21 berths

5.3km<sup>2</sup> in size

143,000m<sup>2</sup> of warehousing and cold storage

## Community Ports

Supporting the oil and gas sector

Serving the local communities

Offering an effective transportation system

Supporting the fishing industry

## Delma Port

## Sila Port

## Sir Bani Yas Cruise Beach

1<sup>st</sup> dedicated Cruise Beach in the Region

## Mugharraq Port

Catering to offshore Oil & Gas  
AED 400 million expansion underway

## Al Mirfa Port



# PORTS CLUSTER CONTRIBUTION TO ECONOMY



Over **5** Billion of UAE's non-oil **GDP** ~ **0.5%** of UAE's non-oil **GDP**



Over **4.2** Billion of Abu Dhabi's non-oil **GDP** ~ **0.9%** of Abu Dhabi's non-oil **GDP**



Over **18,200** Jobs supported in 2020 across Abu Dhabi





# PORTS CLUSTER CONTRIBUTION TO ECONOMY



Over AED **5** Billion of UAE's non-oil **GDP** ~ **0.5%** of UAE's non-oil **GDP**

Over AED **4.2** Billion of Abu Dhabi's non-oil **GDP** ~ **0.9%** of Abu Dhabi's non-oil **GDP**

*“The AD Ports Group capital projects and the tourism it brought in supported an estimated 1,1% of Abu Dhabi gross value added in 2020, or AED 4.9 billion; out of which 0.9% is the Ports Cluster’s contribution.”*

*“The Ports Cluster made **the largest contribution**, supporting 0.51% of the UAE’s GDP.”*





# SUSTAINABLE PORT DEVELOPMENT AT KHALIFA PORT





# CONTINUOUS DEVELOPMENT & GROWTH AT KHALIFA PORT



2013



2016



2021



2024



Future





# KEY PILLARS OF ESG STRATEGY



Health & Safety



Economic Performance



Water Management



Diversity & Inclusion



Human Right



Corporate Governance & Business Practices



Community Welfare



Energy Optimization & Low Carbon Transformation



Responsible Consumption & Waste Management



Supply Chain Sustainability





# OUR NUMBERS SAY EVERYTHING...



**3 of the top 5**

Global Shipping Lines will  
hub over KP by 2024

**11 Million TEUS**

Capacity by 2024

**44 Million + Tons**

Record volume across our ports  
in 2021

**25 Million Tons**

General Cargo capacity by  
2024

**6 Kms**

New quay wall in Khalifa Port

**4.3 Million TEUs**

Highest container volumes

**2.5 Million Tons**

A 15-year record steel  
volume across ports in 2021

**AED 4 Billion**

Development pipeline

**Geographical Expansion**

Several Projects e.g. Iraq, Egypt, Jordan,  
Bahrain, Angola etc.



# LEADING SUSTAINABLE OPERATIONS



We underpin our journey towards a low-carbon transformation through energy optimization and moving away from fossil fuels through the integration of renewable energy across our operations.



**18%**

**Decrease in electricity consumption intensity for container terminals**



Electricity Consumption Intensity for container terminals (kWh per TEU)



Fuel Consumption Intensity per TEU (Litres per TEU)



**13%**

**Decrease Fuel Consumption Intensity per TEU**



**17%**

**Decrease in GHG emission intensity per TEU**



GHG emission intensity per TEU (tCO<sub>2</sub> per TEU)



# ENVIRONMENTAL AND SUSTAINABILITY



## Net Zero Complying Warehouse

In 2022, we successfully constructed first carbon neutral warehouse at Khalifa Port by installing 1.2 MW of solar panels at roof. The warehouse will be operated by Electrical forklifts thus reducing the carbon footprint from ancillary sources.



## Embodied Carbon

Integrate materials with reduced embodied carbon such as in case of construction of Third container terminal at Khalifa Port for CMA. Carry out cost verse carbon assessments through the design process



## Air & Wster Quality Monitoring

The energy efficiency projects undertaken at at Khalifa Port are planned to prevent adverse environmental impacts arising out of developmental activities. Regular monitoring of air quality provides us with relevant data for efficient environmental planning.



## Automated Guided Vehicle (AGVs)

Concessionaires at Khalifa Port are encouraged to invocate and Integrate new technology and alternative design solutions



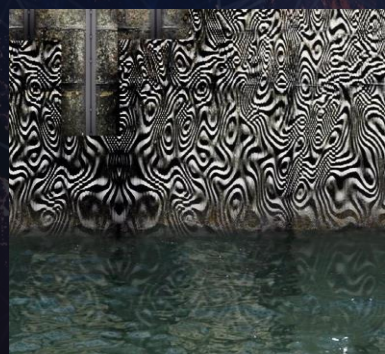
## Coral Relocation Monitoring

In 2020, we successfully relocated healthy corals to the environmental breakwater near Ras Ghanada to protect them from the development footprint of Khalifa Port. In 2021, we collaborated with New York University to monitor the relocated corals and publish results.



## Nature based solutions

Integrate eco engineering solutions into marine infrastructure. For example in Saadiyat marine eco mattresses have been installed. In addition, in partnership with ADQ trialing eco sewalls. Both aim to enhance marine biodiversity.



## Spiny-tailed Lizard Relocation

In collaboration with the Environment Agency Abu Dhabi, we have commenced a two-year relocation project for spiny-tailed lizards, which the IUCN list classifies as vulnerable due to their declining population. The lizards will be relocated to a dedicated conservation area to compensate for the loss of habitat.



## Marine Mammal Migration Study

Undertake marine mammal migration studies. By tracking species movement of migratory, vessel operations can aim to avoid peak migration periods.





# Thank you

[adportsgroup.ae](http://adportsgroup.ae)

[@adportsgroup](https://www.instagram.com/adportsgroup)