



## Introduction from the Director General

Welcome to ADNOC's Sustainability Report for 2014. At ADNOC, we regularly pass milestones that are important reminders of the value we bring to our society and economy. This report is an opportunity to reaffirm the commitments we make to our stakeholders regarding our sustainability performance. Our success along this path is owed to the UAE's wise leadership and is reinforced by our technological expertise, operational excellence, HSE performance, long term strategic plans, global reach and the unwavering ethical standards and management practices we build into the fabric of our operations.

## The energy transition

Modern society consumes energy on a much wider and more complex scale than ever before. By 2050, the world's population is projected to rise from 7 billion to nearly 9 billion. As a key player in the energy industry, ADNOC has a responsibility to protect and shape future energy markets in the face of population growth and short term instabilities and challenges, such as the recent decline in oil price that was experienced towards the end of 2014, and to carve a pathway that will deliver a sustainable supply of energy to the world in the most efficient way possible.

To meet these needs and transition towards a lower carbon future, our energy policies and investments must adopt real world solutions with tangible economic and environmental benefits. To this end, ADNOC's new joint venture company with Abu Dhabi Future Energy Company (Masdar) named 'Al Revadah'. which means 'leadership' in Arabic, has been established to undertake a network of carbon capture, usage and storage (CCUS) projects in the Emirate of Abu Dhabi. The first of these projects is currently underway, and aims to capture 800,000 tonnes of CO<sub>2</sub> annually upon its completion in 2016. The captured CO<sub>2</sub> will be compressed and transported to oil fields operated by ADCO, one of ADNOC's Group Companies, where it will be used to enhance oil recovery and ultimately be stored underground.

#### More collaboration

As a company with global outreach, we have a significant role to play in the energy transition. ADNOC's ability to innovate combined with our experience of working in partnership with others means that we can be essential participants in the emerging energy system. In 2014, ADNOC's fully owned refining subsidiary company TAKREER entered a joint venture partnership with Total, Etihad Airways, Boeing and Masdar Institute of Science and Technology to deliver a sustainable and commercially viable aviation biofuel supply chain in the UAE. The initiative, named 'BIOjet Abu Dhabi: Flight Path to Sustainability' is the first in the Middle East and is aligned with the Abu Dhabi Economic Vision 2030, which seeks to develop sustainable energy sources to diversify the UAE's economy and increase workforce opportunities for Emiratis.

#### Responsible operations

At ADNOC, we have long been known for our strong focus on safety with the goal of no harm to people our communities and the environment. This is a strategic HSE objective that is embedded in our company culture and has long been part of our day-to-day operations. In 2014, we re-launched the revised ADNOC HSE Codes of Practice Manual, which represents the foundation for a stronger and more robust governance of HSE in all aspects of our operations.

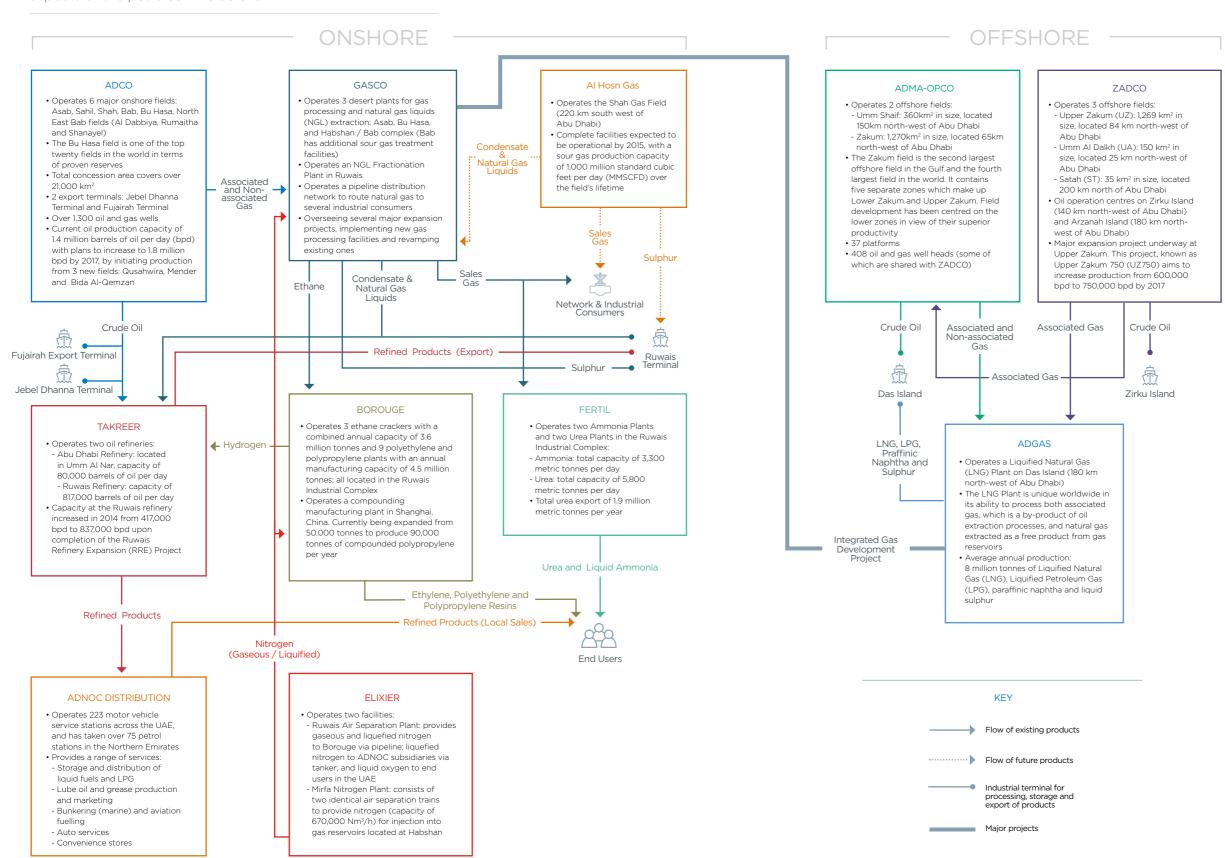
Understanding the impacts of our activities, both positive and negative, is an important component of how we operate. We are taking significant steps to reduce our flaring emissions and are engaging the communities which may be affected as a result of our operations in the local area. In 2014, ahead of drilling a new gas well in the Shweihat area of the Western Region, we undertook a series of dialogues with them to ensure their requirements were met and concerns adequately addressed. The support of our communities is imperative to the long term success of our business. Across all of these issues and more, our aim is to maintain a company that is resilient in challenging times and continues to deliver on-going returns for our stakeholders and the economy and society at large, whilst supporting our work to respect and protect the environment.



Abdulla Nasser AlSuwaidi Director General

## **ADNOC Group Companies**

Integrated energy infrastructure comprised of 15 Group Companies operating onshore and offshore and covering all aspects of the petroleum value chain.



#### NDC

- drilling services to the ADNOC **Group Companies**
- 2,617,120 feet drilled in 2014
- Operates:
- 15 offshore jack-up drilling rigs and 4 offshore island drilling rigs - 33 land drilling rigs
- the quality, quantity and distribution of groundwater in the Emirate of Abu Dhabi)
- 1 multi-purpose service vessel

#### **ADNATCO & NGSCO**

- transportation of LNG, petroleum products, bulk sulphur and polyethylene
- Operates a fleet of:
- 8 LNG Carriers
- 9 Oil & Chemical Tankers
- 7 Bulk Carriers
- 2 Container Vessels
- 1 LEG Carrier

#### ESNAAD

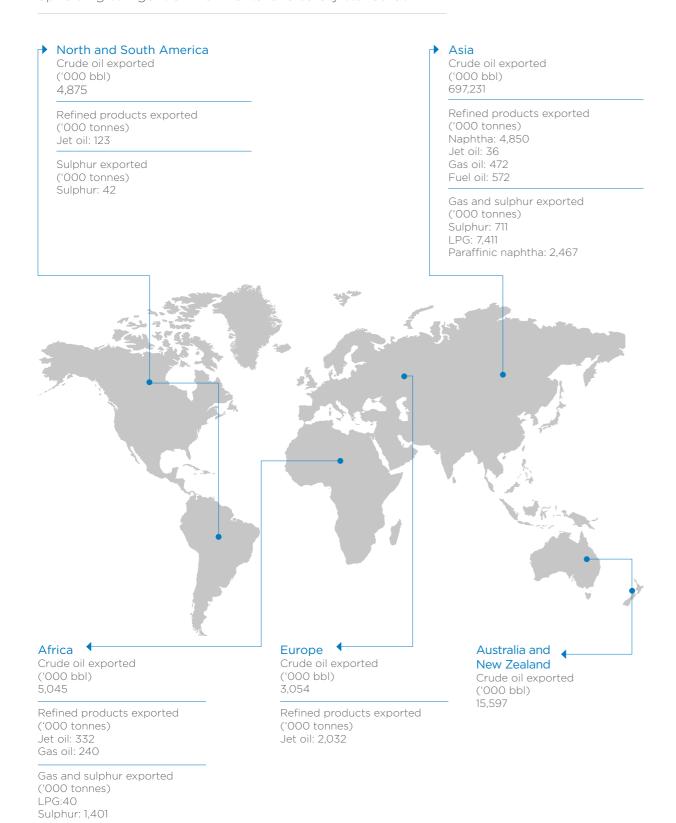
- Provides a range of facilities, and gas sector, including:
- Offshore marine support services (ESNAAD operates
- Berthing, bunkering and bulk supply
- Port services
- Drilling fluids services
- Specialised production
- Operates a Grinding Plant,
   Blending Plant and Brine Plant
  in the Mussafah Offshore Supply Base

#### **IRSHAD**

- Provides marine services to the Island, Zirku Island, Zakum Field and Mubarraz) and Fujairah
- Services include:
- Pilotage, berthing / unberthing of O&G tankers and the loading of oil products - Offshore terminal
- maintenance, inspection and
- management of a fleet of 50 vessels of which 10 ASD Tugs, 4 tail back boats and 4 pilot boats are ADNOC owned

## Products and markets

Transporting oil, gas and petroleum products is a challenge we meet every day to meet our customers' needs while upholding stringent environmental and safety standards.





### Crude oil and condensate

The main onshore grade for our crude oil is Murban. Our offshore grades include Das Crude (a newly introduced high quality crude blend from the Umm Shaif and Lower Zakum oilfields) and Upper Zakum.

#### Petroleum products

ADNOC's refined products are produced by TAKREER. They are sold domestically by ADNOC DISTRIBUTION and are also exported to international markets.

## Gas and sulphur

Sulphur is a valuable by-product of our operations. Sulphur production is set to increase significantly when production commences from the sour Shah Arab field, currently being developed by Al Hosn Gas. ADNOC also markets its share of Liquified Petroleum Gas (LPG) and paraffinic naphtha, which are produced by GASCO and ADGAS.

## Petrochemicals

ADNOC's petrochemicals are produced by Borouge and FERTIL.

Borouge is a leading provider of innovative, value creating plastics. Borouge's petrochemical manufacturing plant is located in Ruwais. In 2014. Borouge took an unprecedented step forward and expanded the petrochemical plant's annual capacity by a further 2.5 million tonnes per year from the previous 2 million tonne per year capacity, under the name 'Borouge 3 Expansion Project'. As a result, the Ruwais facility is the largest fullyintegrated single-site polyolefins complex in the world with a capacity to produce 4.5 million tonnes of polyethylene and polypropylene annually.

FERTIL is a leading producer and supplier of granular urea and ammonia fertilizers in the Middle East with global exports to the Indian sub-continent, Far East, Africa, USA, Latin America and Australia. About 6% of its annual production is marketed locally within the United Arab Emirates, while 94% is exported.

#### First shipment of new 'Das Crude' blend

ADNOC successfully exported the first shipment of its new blend 'Das Crude', produced by ADMA-OPCO, on July 4<sup>th</sup> - a date which coincides with the 52<sup>nd</sup> Anniversary of ADMA-OPCO's first crude shipment from Das Island

Das Crude is a blend of the previous Umm Shaif and Lower Zakum grades. It was introduced to the market in line with SPC directives for a competitive specification that matches international standards and increases flexibility and profitability.

ADMA-OPCO's plan to increase production is another reason for creating the new blend The company has plans to boost production by 100,000 bpd at the Lower Zakum field, reaching 425,000 bpd by 2016. In addition, the new production planned from Nasr Field, expected at 65,000 bpd over the coming few years, along with the current Umm Shaif production of 275,000 bpd, will bring the total ADMA-OPCO oil production coming to Das Island for processing, storage and export up to around 765,000 bpd, which is part of the company's overall scheme to increase production to million barrels per day.

## Stakeholders

As an energy supplier, we have many responsibilities - to our employees, contractors and partners, government and regulators, industry and community.

Working together with our stakeholders allows us to appreciate different viewpoints and maintain a global perspective on our most material topics. It also helps us build mutually beneficial and long-lasting relationships and create opportunities that are aligned with their interests. This is fundamental towards helping us continue to improve our company. We use a variety of mechanisms to engage our stakeholders, including internal and external one-onone and group dialogues and briefings, senior executive speeches and press releases, community consultations, email communications, and publications such as the Annual Sustainability Report and our quarterly newsletters.

## Employees

Our nearly 60,000 employees are the drivers for our continued

business success. We keep our employees informed about the context within which they work and have established channels for our employees to raise concerns across our operating sites. We have an ongoing dialogue with our employees about a wide range of issues, including benefits, development opportunities and diversity.

# Suppliers, contractors and partners

Like our industry peers, ADNOC rarely works in isolation. For example, the Shah Gas Development Project operated by Al Hosn Gas employed over 43,000 contractors at its peak in 2014. Safe and responsible operations depend on the capability and performance of our suppliers, contractors and partners. To this end, we set operational standards through legally binding agreements. Training and dialogue also help build the capability of our contractors.

# Government and regulators

We engage with the local and federal government on many fronts, and aim to maintain dialogue with all ministries, government agencies and regulatory departments at every stage of our operations. We engage in policy debates that are of concern to us and the communities in which we operate, such as carbon and water management, security and nationalisation.

#### Local communities

Our relationships with communities are important for all our activities, but particularly for major new projects where our presence may bring about



changes in the local areas, such as jobs and support for community development, as well as increased road traffic and changes in the landscape. We engage with local communities through public consultations and meetings with local representatives.

## Industry

We work through industry groups to help establish standards and address complex energy challenges, and we are members of industry bodies such as the International Association of Oil & Gas Producers (IOGP) and the American Petroleum Institute (API).

### Academic institutes

In addition to establishing our three academic institutes, which include the Petroleum Institute, we collaborate with research institutions on various initiatives across the UAE to encourage more youth towards innovation and excellence on future energy and sustainable development.

#### Customers

ADNOC's millions of customers range from consumers purchasing our fuels and lubricants to large-scale industrial customers of oil, natural gas and petrochemicals. Through our concerned Group Companies, we engage with customers about supply chain management, GHG emissions and the sustainability of our products across their life cycle, among other topics.

## Material topics

A key step in developing the content of this Sustainability Report is ensuring the content focuses on the sustainability challenges and subjects that matter most to our stakeholders and people who have an interest in our activities.

We use a structured approach to select the report's content, which is informed by internal priorities as well as external focus areas, as highlighted in international reporting standards, local and federal policies and regulatory

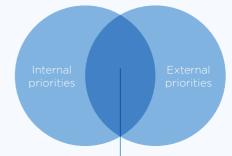
frameworks, industry and peer reporting practices, media coverage and public domain. The information is gathered in different ways including formal meetings, workshops and online feedback.

#### 2014 Material topics

issues as being of high concern to stakeholders and of high significance for ADNOC, and are therefore emphasized in this report:

- Occupational health an
   safety management
- GHG emissions
- Hydrocarbon flaring
- Energy consumption
- Energy efficiency
- Water consumption
- Local communities
- Employment
- Training and development
- Emiratization

## Our approach to materiality



Input from internal experts Risk register Business priorities Audience research
External reporting trends
Industry benchmarking and peer review
International media review

Material issues judged as those that represent significant external concerns that also match internal priorities

# Sustainability Performance Summary

Data on our sustainability performance from 2010 to 2014 is presented below.

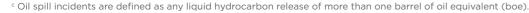
PEOPLE	2010	2011	2012	2013	2014
Total number of employees <sup>a</sup>	>32,000	>33,000	>37,000	>50,000	>60,000
Percentage of employees who are UAE nationals <sup>a</sup> (%)	-	33	33	32	34
Percentage of senior and executive management positions	-	-	65	74	69.2
occupied by UAE national employees <sup>a</sup>					
Women in workforce (%)	6	8.5	8.7	8.3	10.1
Employee Training (thousand man hours)	775	940	1,160	1,900	2,341
Employee Training (AED million)	47.5	78.5	229.5	306	445.6
Fatalities <sup>b</sup> – employees	2	1	0	2	0
Fatalities <sup>b</sup> – contractors	2	12	12	9	8
Hours worked (million hours)	355	589	865	710	581
Fatal Accident Rate (FAR) - per 100 million hours	1.13	2.21	1.39	1.55	1.38
Lost Time Injury Frequency (LTIF) - per million hours worked	0.19	0.14	0.1	0.09	0.11

<sup>a</sup> Employees refers to ADNOC and Group Company employees across all positions.

<sup>&</sup>lt;sup>b</sup> Refers to recordable fatalities.



<sup>a</sup> Minor amendments have been made to 2012 flaring data so data will differ from that disclosed in ADNOC 2012 Sustainability Report. <sup>b</sup> GHG emission values are based on equity share approach and derived using the Intergovernmental Panel for Climate Change (IPCC) 100year Global Warming Potentials (GWP). Limited assurance was performed for the GHG emissions reported in 2014 only; the 5 year trend may therefore not be representative of ADNOC's GHG. emissions over this period. A copy of the External Assurance Statement is available in the 2014 ADNOC Sustainability Report.



ENVIRONMENT	2010	2011	2012	2013	2014	
laring (MMSCFD) <sup>a</sup>	53	63	60	62	69.9	
GHG Emissions (million tonnes CO <sub>2</sub> e) <sup>b</sup>	19.8	21.4	23.2	24.7	24.8	
Direct energy consumption (million GJ)	279.5	450	527	912.6	532.5	
ndirect energy consumption (million GJ)	21	18	21.2	18.6	17.5	
Energy savings (million GJ)	13	14	17.9	16.9	21.6	
Environmental expenditure (AED million)	-	602	387.5	584	637	
Dil spill incidents - to land and water	-	-	25	38	24	
Volume of oil released (boe)	-	-	1,125	3,715	2,111	

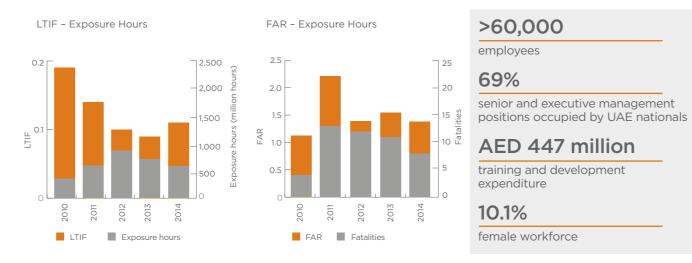
SOCIETY	2010	2011	2012	2013	2014
Active scholarships <sup>a</sup>	964	1,236	1,497	3,289	4,285
Petroleum Institute graduates	39	47	71	121	209
Petroleum Institute graduates - Emiratis (%)	-	>67	66	43.8	43.5
Emiratis in executive and senior management positions (%)	-	66.5	65	74	69
Community investments <sup>b</sup> (AED million)	-	-	106	137	114
Procurement budget spent on local suppliers <sup>c</sup> (%)	75	77	70	89	83

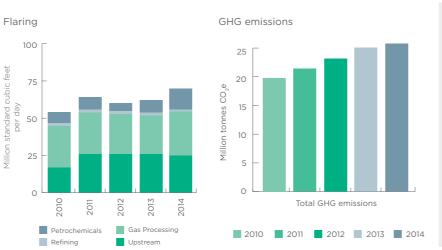
<sup>a</sup> Scholarships are awarded under ADNOC's Scholarship Program, which sponsors talented UAE nationals to pursue their post-secondary education in reputable academic institutions in the UAE and abroad, and to specialist in the various technical disciplines essential to the oil

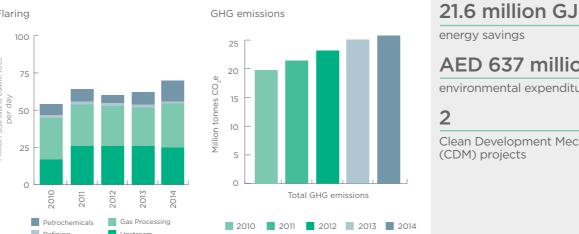
<sup>b</sup> Excludes ADNOC's broad infrastructure investments which are difficult to quantify because of their wide-ranging scale and diversity.

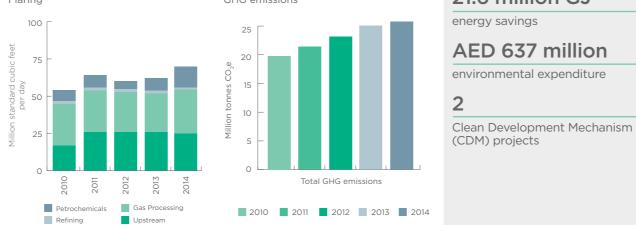
c ADNOC defines a local supplier as a provider of materials, products and services that is based in the UAE or has a local sponsor in the UAE. The sponsorship arrangement often requires the sponsor to share a percentage of the contract with their sponsor, encuring that a proportion of the contract value is realised locally.

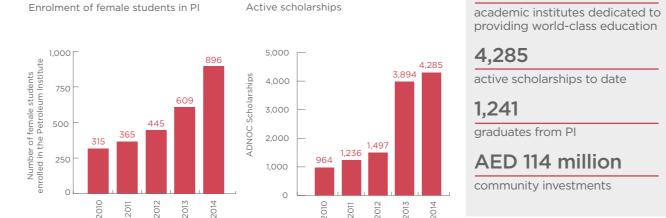
Cautionary statement: Where '-' is stated, the data is either not available for the reporting year or has been disclosed in the respective ADNOC sustainability report in a manner that is not consistent with new collection and reporting methodologies that have taken effect after the data's disclosure. In the latter case, the data has been omitted from this publication as it is not comparable with data reported in later years under the revised protocols.











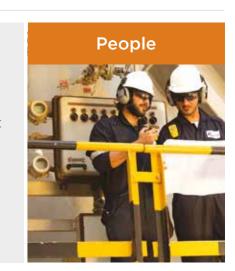
## How we operate

Our role to supply energy comes with many responsibilities to our employees, shareholders, neighbours, customers, communities and environment.

## Our approach

Regardless of where our people are located or the type of work they undertake, we strive to create a working environment that is free from occupational illness or injury. Our principles and requirements for safe, reliable and compliant operations are part of our Health, Safety and Environment Management System (HSEMS) against which all ADNOC operations are required to align with. Collectively, these requirements are designed to enable our operations to safely return to full function as soon as possible.

Employing and developing talented and motivated people who share our values is critical to our long-term success. We are committed to providing a work environment in which everyone is treated fairly and with respect and has the opportunity to maximise their potential.



## Our approach

We operate our facilities with integrity and with the goal of preventing environmental incidents. The principle of Pollution Prevention and Control (PPC) is central to how we operate, and we concentrate our efforts on taking a proactive approach towards environmental protection rather than one that focuses on remedial efforts alone.

Our operations are required to assess the environmental risks and impacts of new projects and substantially altered existing projects, and ensue our risks are managed to an acceptable level and do not result in unacceptable consequences to our people, environment, assets and our reputation. This is supplemented with continuous environmental monitoring during the development and active phases of our projects and through to decommissioning.



### Our approach

As the national oil company of Abu Dhabi, ADNOC has an important role to play in driving the creation of in-country value. We accomplish this in several ways that include the transfer of knowledge and technology, investing in education and research, job creation and development of local talent and the local supply chain, developing critical infrastructure to support our economy's growth and development, and the establishment of best practices across the oil and gas industry.

We strive to demonstrate this commitment through practical actions undertaken in partnership with our stakeholders to ensure that our operations are aligned with their interests and that we continue to build mutually beneficial relationships. Our aim is to create opportunities that positively enhance the lives of people who work for us and live near our operations, as well as the society overall.



—— Rising to the Energy Challenge - 2014 ADNOC Sustainability Report

## About ADNOC

ADNOC is one of the world's leading oil and gas companies, with an annual oil production of over 2.7 million barrels per day and an integrated energy infrastructure comprised of 15 specialist subsidiary and joint venture companies known as the ADNOC Group Companies.

Thriving on a spirit of enterprise and a commitment to safely and reliably deliver energy to our domestic and global consumers, our Group Companies' operations cover all aspects of the hydrocarbon value chain, including crude oil and natural gas exploration, production, refining, processing, manufacture of petrochemicals and global marketing.

ADNOC's headquarters are located in Abu Dhabi, UAE. Our new head office, which is being constructed towards LEED certification standards, will provide improved services and facilities to our staff, visitors and stakeholders. Our major operations are based in the UAE.

### Upstream

Upstream encompasses high-quality exploration opportunities, a portfolio of world-class projects and a diverse set of producing assets. Upstream also operates the infrastructure necessary to deliver oil and gas to the market.

#### Downstream

Downstream is the business that manufactures oil products and petrochemicals, and supplies fuels, lubricants and other high-value products and feedstocks to our local and global customers.

#### Our leadership

The Supreme Petroleum Council (SPC) is the highest authority responsible for the petroleum industry in the Emirate of Abu Dhabi. The Council formulates and oversees the implementation of Abu Dhabi's petroleum policy and follows up its implementation across all areas of the petroleum industry to ensure that the set goals are accomplished.

The SPC functions as ADNOC's governing board and oversight committee. H.H. Sheikh Khalifa bin Zayed Al-Nahyan, the president of the UAE and Ruler of Abu Dhabi, is the chairman of the SPC.



## **EXPLORATION** AND PRODUCTION



- Exploring for oil and gas onshore and offshore
- Developing fields
- Producing oil and



**PROCESSING** AND REFINING



- Gas processing and natural gas liquid (NGL) extraction
- Refining crude oil into various products including fuels and lubricants



**PETROCHEMICALS** PRODUCTION



 Producina petrochemicals (polyolefins including polyethylene and polypropylene as well as urea and ammonia)



## MARKETING AND DISTRIBUTION



- Shipping and trading
- Supply and distribution

www.adnoc.ae \_\_\_\_

# About this publication:

This is the sixth year that ADNOC reports on its sustainability efforts. This publication provides an executive summary of ADNOC's 2014 operations in the United Arab Emirates and ADNOC's sustainability performance for the five year period starting from 1 January 2010 to 31 December 2014. To view our full ADNOC 2014 Sustainability Report, which has been prepared in accordance with the Global Reporting Initiative (GRI) Generation 3.1 (G3.1) Sustainability Reporting Guidelines (including the Oil and Gas Sector Supplement), please visit www.adnoc.ae/sustainability.

Please direct any questions regarding this publication or the full ADNOC 2014 Sustainability Report to:

Health, Safety and Environment Division Abu Dhabi National Oil Company P.O. Box 898 Abu Dhabi, United Arab Emirates T: +971 (0)2 6024740 F: +971 (0)2 6668089 E: sustainability@adnoc.ae





The contents of this report can be reproduced or re-printed provided that ADNOC is credited.