



# Annual Report 2020



**Committed**  
to Sustainable  
Development





# The Best Successor to The Best Predecessor



The Late Sultan Qaboos bin Said  
May Allah Rest His Soul in Peace

His Majesty Sultan  
Haitham Bin Tarik bin Taimur

# Foreword



Mohammed bin Hamad Al Rumhy  
Minister of Energy and Minerals, Sultanate of Oman

The previous year has witnessed many challenges as the world is still suffering from the irregular circumstances caused by Covid-19 pandemic that has been affecting individuals, societies and the entire global economy until today, in addition to the continuous decline of the oil prices and its impacts over the national economy, yet it was full of accomplishments as well. We were able to reduce, as possible as we could, the impacts of the pandemic over the sector through adhering to government procedures and recommendations. We have made use of technology, different means of remote work and any other means to mitigate the impacts and be active and flexible on the long term to overcome any similar challenges in the future.

Regarding the drop in the oil prices, the Sultanate had an active role in cooperating and working with other countries and international organizations such as the Organization of Petroleum Exporting Countries (OPEC) to reduce the oil production based on the requirements defined by OPEC for each country.

During Last year, the Royal Decree No. (96/2020) was issued on 18th of August to join the Mining sector under the specialties of Ministry of Oil and Gas with its name changed to the Ministry of Energy and Minerals, defining its specialties and organizational structure.

Despite oil production reduction, we have worked on achieving all the target goals of the Energy sector through continuous prospecting and exploration activities. We were able to begin production from the Ghazeer field in concession area No. 61, ahead of schedule. The produced gas from the field will contribute to achieve Oman 2040 Vision goals by supplying more energy to local industry and contributing to the diversification of sources of income.

The year of 2020 has also witnessed signed of four petroleum agreements. The first of which was for block area No. 12 (9546 square kilometers) with Total Exploration and Production and "PTTEP" (joint Venture). The second agreement was for concession area No. 58, which covers 4,557 square kilometers and was signed with Tethys Oil. The third agreement, for concession area No. 36 with EOG Resources. A petroleum agreement was also signed between the Ministry and Maha Energy for concession area No. 70, which covers 639 square kilometers.

In terms of electricity and renewable energy sector, the project for producing electricity by use of solar energy in the Wilayate of Ibri with an estimated production capacity of 500 megawatts is under process and is expected to contribute to the power supply of approximately 33,000 houses. In regard with mineral sector, the Ministry has adopted a new investment method for mining sites, represented by establishing large concession mining sites, to be open for competition by local and global prospecting and mining companies. These sites will help creating an added value for mineral ores in the Sultanate through establishing mining and/or manufacturing projects in the downstream industries as well as providing secured job opportunities for citizens.

Within this regard, the Ministry has negotiated with MDO (Mineral Developments Oman) in order to grant it a number of identified mining concession areas for investment or to attract global Investors. The Ministry's strategy is to establish public sites for of building materials (crushers), backfills, marbles and ornamental stones to reduce its environmental and social impacts and to be monitored easily. The Ministry first conducts preliminary studies to determine the viability of these sites for mining activities and then offers them for investment to local companies based on competitive approached as well as technical, environmental and financial requirements in order to ensure the success and the sustainability of these projects.

In-country value is a vital component in all energy sector-related projects as it maximizes the country's returns through localizing job opportunities, using locally manufactured materials and devices, and assigning business to small and medium enterprises. OQ LPIC (Liwa Plastic Industrial Complex) that produces polypropylene and polyethylene for the first time in the Sultanate is amongst the most important projects in 2020 targeted to boost in country value.

In conclusion, I would like to express my gratitude to all partners working in the Energy and Minerals sector either companies or individuals for their tireless efforts and commitment to excellence, which have resulted in these tangible results. I am looking forward to continue these efforts and strive to achieve the targeted national goals resulting to the progress and prosperity of our beloved country under the auspices of His Majesty Sultan Haitham bin Tariq Al Said. Our wishes of peace and blessings to you all.

# Introduction

Last year, a Royal Decree was issued to incorporate the mining sector in the Ministry of Oil and Gas. Its name was changed to the Ministry of Energy and Minerals, with the minerals sector being added to the Ministry's responsibilities and organizational structure. As a result, the Ministry has taken on the role of official entity for the sectors of oil, gas, minerals, electricity, and renewable energy.

During the year of 2020, most economic activities has declined as a result of the Coronavirus (COVID-19) pandemic. The followed preventive measures, such as isolation operations, total lockdown and widespread closures, had a direct impact on the Sultanate's business and economic activities, resulting in a noticeable economic decline in the sectors.

The Ministry of Energy and Minerals pays a great effort to achieve the various goals of developing and improving the performance of oil and gas, minerals, electricity and renewable energy sectors, all of which are critical sectors to the national economy. In this report, we are pleased to view the most remarkable indicators and achievements accomplished by these sectors by the end of 2020.

As for the Oil and Gas sector, several exploration and production companies have conducted many seismic surveys that included multiple concession areas. The total area of the of 3-D seismic surveys has exceeded 4600 square kilometers and the 2-D surveys has approximately reached 200 square kilometers by the end of the year. In addition to the drilling and analyzing 80 exploration and appraisal wells were drilled and tested in the oil and gas sector, which contributed to adding new oil and gas reserves that will ultimately, lead to continuous production. As for the reserves indicators, the expected reserves of crude oil and condensates in the Sultanate at the end of 2020 has approximately reached 4706 million barrels, whilst the natural gas reserves at the end of the year has reached around 24 trillion cubic feet. Also new three petroleum agreements have been concluded with a number of local and international companies whereby the agreed investment value in the phase will be around 85 million dol-

lars. The year 2020 has also witnessed a decline of 8% in the export volume of oil and condensate compared to the same period in 2019 as it reached around 287 million barrel in 2020 opposite to 310 million barrel at the same period of 2019. China has topped the list of Omani Oil importing countries during the year of 2020, importing 86.4%.

In order to create job opportunities for Omanis in all Oil and Gas companies, the Ministry has developed rehabilitation plans and training programs to improve workers efficiency as well as encouraging Oil companies to recruit local Omani workers rather than expats.

The rate of Omanization among companies operating in the upstream and downstream of the Oil and Gas sector reached around 85% in 2020, with a 5.7% increase in the number of Omani employees compared to the previous year.

As for the mining industry, like the rest of the Sultanate's industries, has been affected by the worldwide economic recession caused by the Coronavirus (COVID-19) pandemic. According to the data and inputs mentioned in this report, the basic performance indicators are as follows: The collected royalties have decreased by 34%, whilst transit fees have decreased by 30%. Fines have decreased by 49%, whereas, mineral raw material production has decreased by 19% compared to the same period last year, due to decreased demand for these materials as well as the delay of companies in submitting their monthly production reports. Regarding the new exploration and mining licenses issued in the first quarter of 2020, which witnessed a notable increase compared to the same period of the previous year. Measures have been followed to ensure the continuity of licenses issuance using precautionary measures to prevent the spread of Coronavirus.

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# Most Significant Events in 2020

## IGRC 2020 Hosting

For the first time in the Middle East, the Sultanate hosted the International Gas Union Research Conference (IGRC) 2020 at the Oman Convention and Exhibition Centre from February 24th to 26th, 2020 with the participation of 32 countries. The conference aimed to discuss the challenges facing the gas industry and its future sustainability.



## Gas Production in Ghazeer Field

On October 12th, 2020, the Ministry of Energy and Minerals, in collaboration with BP Oman, OQ and Petronas, announced that gas production has begun in Ghazeer field in the concession area - Block 61 in its second phase, 33 months after signing the Ghazeer field development agreement.

## OQ LPIC's Commercial Launch (Liwa Plastic Industrial Complex)

Liwa Plastic Industries Complex is one of the major projects in 2020 producing polypropylene and polyethylene for the first time in the Sultanate. The goal of the project is to increase the added value within the exploration and production, refinery and petrochemical industries.



# 2020 key indicators of Energy and Minerals sectors

## OIL & GAS INDICATORS



Average daily production of crude oil and condensates reached (951) thousand barrels

Three new production-sharing agreements for oil and gas exploration were signed



Total petroleum exports touches (287) million barrels

The Sultanate's total reserves of crude oil and condensates are about (4706) Million barrels



The average price of Omani crude oil was 46 USD per barrel.

China topped the list of importing countries at 86.4%.



(80) Exploration and appraisal wells, where 58 are Oil wells and 22 Gas are wells.

Total petroleum products output from Mina Al Fahal and Sohar refineries was (94) million barrels



Omanisation in the oil & gas sector reached 85 %.

The total number of productive fields in the sultanate of Oman are 414 , of which 342 are oil fields and 72 gas fields.



Total natural gas reserves are (24) trillion cubic feet

Average daily production of natural gas was (122) million cubic metres



The Sultanate's production of LPG was (552.3) thousand metric tonnes

LNG exports were (10.2) million metric tonnes



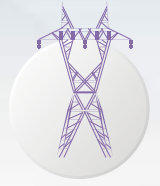


# Electricity and Renewable Energy Sector



**The Electricity Net Production of about 36491676 MWH.**

**The Capacitance of about 10677 MW**



**Omanisation in the sector of about 94%**

**Electricity Consumption of about 32990 MWH**



# Minerals Sector



**Total production is 97 Million tons**

**Total Revenue of about 15 million R.O**



**Sales values of about 93 Million R.O**

**Total sales quantity is about 60 Million tons**



**Total Mining licenses issued are 30 , while exploration licenses are 26.**

**Exported quantities are 37 Million tons**



**Omanisation reached 22%**



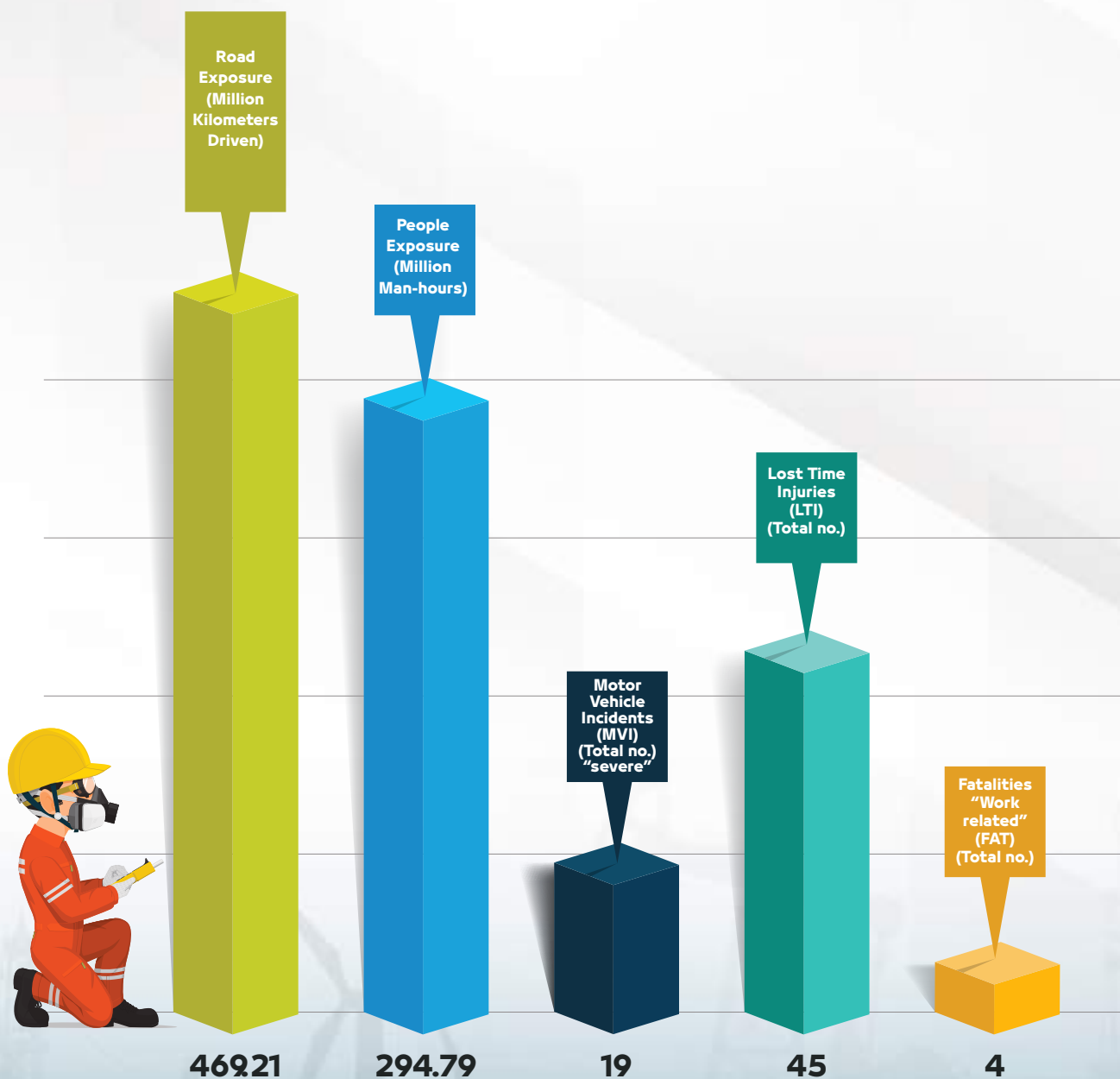
# Oil and Gas Sector



# HEALTH, SAFETY, SECURITY AND ENVIRONMENT (HSSE)

The Ministry of Energy & Minerals emphasises the importance of adherence to HSSE standards as production operations are prone to risk. The operating companies consider health and safety as one of their main priorities. Therefore, they organise awareness programmers for their employees and develop health and safety procedures in the work environment to protect employees working in the sector from risks, as well as to protect and preserve the environment from harm.

Fatalities "Work related" (FAT) (Total no.)	Lost Time Injuries (LTI) (Total no.)	Motor Vehicle Incidents (MVI) (Total no.) "severe"	People Exposure (Million Man-hours)	Road Exposure (Million Kilometers Driven)
4	45	19	294.79	469.21



# OMANISATION IN THE OIL & GAS Sector

The number of employees working in oil and gas companies operating in Oman during 2020 reached (19,766), of which (16,898) were Omanis and (2,868) were expatriates. By the end of 2020, Omanisation in the upstream and downstream businesses of the oil & gas sector reached 85 %, an increase of 5.7% in number of Omanis compared to 2019. These figures do not include the workers in the contracting and services companies operating in the oil & gas sector.

Workforce volume and Omanisation percentage in the oil & gas sector

Sector	Description	No. of workers	%	Total by sector
<b>Oil*</b>	Omani	12,681	88	14,188
	Expatriate	1,752	12	
<b>Gas**</b>	Omani	4,217	79	5,333
	Expatriate	1,116	21	
<b>Total workforce</b>	Omani	16,898	85	19,766
	Expatriate	2,868	15	

\*Includes all production, exploration, companies in the oil & gas sector

\*\*Includes OLNG & OQ

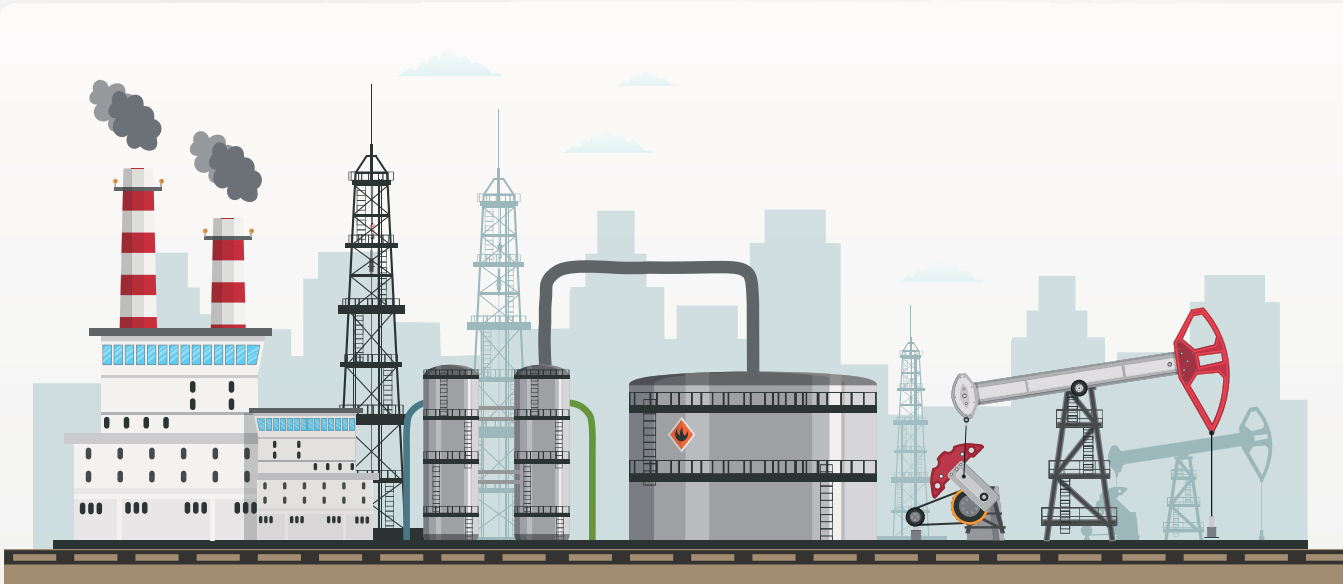





## Companies operating in concession areas

By the end of 2020, 19 companies were involved in oil and gas exploration and production operations in 37 concession areas. However, there were two relinquishments: block 40 was relinquished by Petrotel Oman Offshore LLC and block 66 was relinquished by MOL Oman Ltd.

Moreover, the Ministry of Energy and Minerals signed three production-sharing agreement, as follows:

List of new petroleum agreements in 2020



Company	Concession Area	Date Signing	Investment Value for Phase 1 ( Million USD)
	12	19/2/2020	50
	70	5/10/2020	20
	58	5/7/2020	15

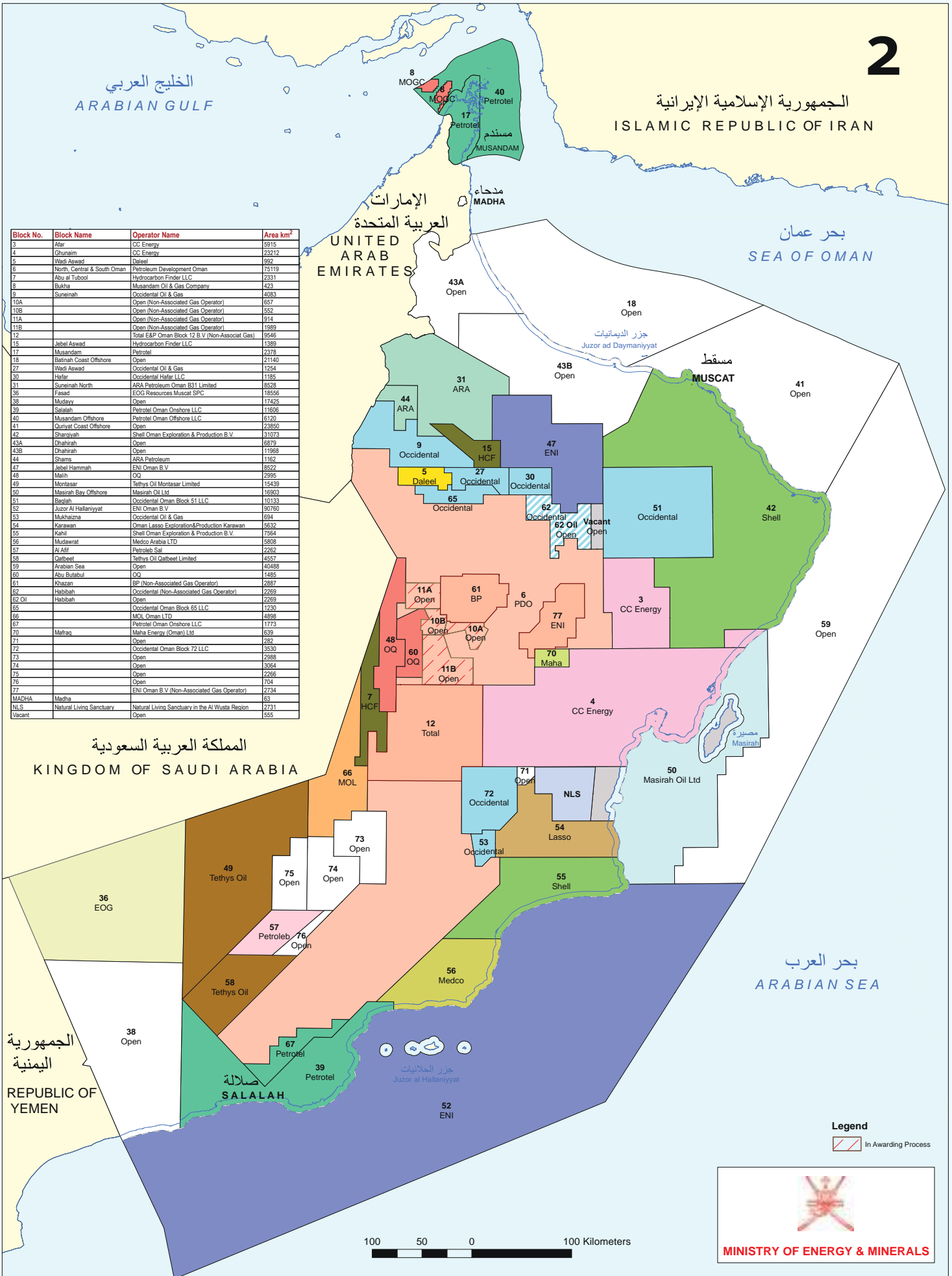
List Of Oprating Companies in Concession Areas. until the End of 2020

NO	Company Name		Blocks	Nationality	Date of Singed EPSA
1	Petroleum Development Oman (PDO)		6	Omani	19/12/2004
2	Occidental Oman	Occidental Oman Incorporated	9	American	7/12/1975
		Occidental Oman Oil and Gas	27		15/6/1998
			30		14/11/2017
		Occidental Mukhaizna	53		21/6/2005
		Occidental Oman Gas	62		14/11/2008
		Occidental Oman	51		16/12/2018
		Occidental Oman	65		16/12/2018
		Occidental Oman	72		28/2/2019
3	ARA Petroleum	ARA Petroleum	44	Omani	21/7/2002
		ARA Petroleum Limited blk 31	31		14/11/2017
4	Daleel Petroleum LLC		5	Oman/ China	7/8/2019
5	EOG Resources Muscat SPC		36	American	10/8/2011
6	*CC Energy Development S.A.L		4 g* 3	Lebanese	9/2/2003
7	Hydrocarbon Finer E&P		7	Omani	28/1/2016
			15		6/9/2005
8	BP Exploration ( Epsilon)		61	British	22/1/2007
9	Petrotel Oman	PetroTel Oman LLC	17	American	23/5/2009
		*PetroTel Oman Onshore LLC	67 g* 39		26/3/2013
10	Masirah Oil Ltd		50	British	28/2/2011
11	Shell Development Oman	Shell Development Oman B.V.	42	British-Dutch	11/10/2011
		Shell Development Oman B.V.	55	British-Dutch	10/10/2019
12	OQ	OOCEP	60	Omani	19/3/2011
		OOCEP	48	Omani	31/1/2017
		MOGC	8	Omani	
13	Medco Arabia LTD		56	Indonesian	20/11/2014
14	Oman-Lasso E&P Karwan Limited		54	American	22/9/2015
15	Tethys Oil	Tethys Oil Montasar Limited	49	Swedish	14/11/2017
		Tethys Oil Qatbeet Limited	58	Swedish	5/7/2020
16	ENI Oman B.V.		52	Italian	14/11/2017
			47		14/1/2019
			77		31/7/2019
17	Petroleb SAL		57	Lebanese	10/1/2018
18	Total E&P Oman Block 12 B.V.		12	French	19/2/2020
19	Maha Energy Oman Ltd		70	Swedish	5/10/2020

\* Two blocks with one EPSA

# SULTANATE OF OMAN CONCESSION BOUNDARIES

2



Block No.	Block Name	Operator Name	Area km <sup>2</sup>
3	Alar	OC Energy	5915
4	Churaim	OC Energy	23212
5	Wadi Aswad	Daleel	992
6	North, Central & South Oman	Petroleum Development Oman	75119
7	Abu al Tuboal	Hydrocarbon Finder LLC	2331
8	Bukha	Musandam Oil & Gas Company	423
9	Sunneinah	Occidental Oil & Gas	4383
10A		Open (Non-Associated Gas Operator)	657
10B		Open (Non-Associated Gas Operator)	552
11A		Open (Non-Associated Gas Operator)	914
11B		Open (Non-Associated Gas Operator)	1393
12	Total E&P Oman Block 12 B.V. (Non-Associat Gas)		9546
15	Jabel Aswad	Hydrocarbon Finder LLC	1389
17	Musandam	Petrotel	2378
18	Balnah Coast Offshore	Open	21140
27	Wadi Aswad	Occidental Oil & Gas	1254
30	Hafir	Occidental Hader LLC	1185
31	Sunneinah North	ARA Petroleum Oman B31 Limited	8528
36	Fasad	EOG Resources Muscat SPC	18556
38	Mudavy	Open	17425
39	Salalah	Petrotel Oman Onshore LLC	11606
40	Musandam Offshore	Petrotel Oman Offshore LLC	6120
41	Qunyah Coast Offshore	Open	23850
42	Sharqiayah	Shell Oman Exploration & Production B.V.	31073
43A	Dhahrah	Open	6879
43B	Dhahrah	Open	11968
44	Shams	ARA Petroleum	1165
47	Jabel Hammah	ENI Oman B.V	8522
48	Malih	OQ	2955
49	Montasar	Tethys Oil Montasar Limited	15439
50	Masirah Bay Offshore	Masirah Oil Ltd	15903
51	Balah	Occidental Oman Block 51 LLC	10133
52	Juzor Al Hallaniyyat	ENI Oman B.V	90760
53	Mukhaizna	Occidental Oil & Gas	694
54	Karawan	Oman Lasso Exploration&Production Karawan	5632
55	Kahil	Shell Oman Exploration & Production B.V.	7564
56	Mudawarat	Medco Arabia LTD	5908
57	Al Aif	Petroleb Sal	2262
58	Qalbeet	Tethys Oil Qalbeet Limited	4557
59	Arabian Sea	Open	40488
60	Abu Balut	OQ	1148
61	Khazan	BP (Non-Associated Gas Operator)	2887
62	Habibah	Occidental (Non-Associated Gas Operator)	2269
62 Oil	Habibah	Open	2269
65		Occidental Oman Block 65 LLC	1230
66		MOL Oman LTD	4889
67		Petrotel Oman Onshore LLC	1773
70	Mafraq	Maha Energy (Oman) Ltd	639
71		Open	282
72		Occidental Oman Block 72 LLC	2530
73		Open	2985
74		Open	3064
75		Open	2266
76		Open	704
77		ENI Oman B.V. (Non-Associated Gas Operator)	2734
MADHA	Madha	Open	2731
NLS	Natural Living Sanctuary	Natural Living Sanctuary in the Al Wusta Region	555
Vacant		Open	555

Legend  
 In Awarding Process

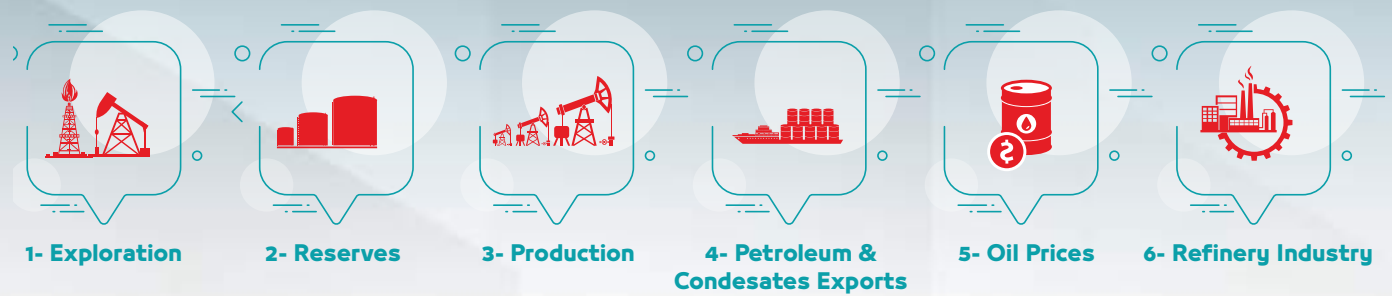


100 50 0 100 Kilometers

Print Date : 02-Nov-2020

This map is not an authority on international boundaries.

# Oil Sector



## 1. Exploration

Oil and Gas companies operating in the concession areas in 2020 drilled, tested and evaluated (58) exploration and appraisal wells 23 of which were drilled previously, and tested and evaluated in 2020. The petro-physical analysis and productivity tests in some of the wells showed positive results, adding new oil reserves.

The following table shows the number of exploration and appraisal wells of each company in the oil sector:

Petroleum Development Oman	37
Occidental Oman	4
OQ	5
Daleel Petroleum	3
CC Energy Development	4
Other companies*	5



Others companies Includes ( Petrotel , Masirah Oil , Medco Arabia, ENI)





## 2. Reserves

The total reserves of crude oil and condensates in the Sultanate amounted to about (4706) Million barrels decreasing by 3% in comparison with 2019. Petroleum Development Oman contributes about 68.5% of the total reserves of the year.

Expected reserves of crude oil & condensates at the end of 2020

Expected Reserve (Million Barrels)

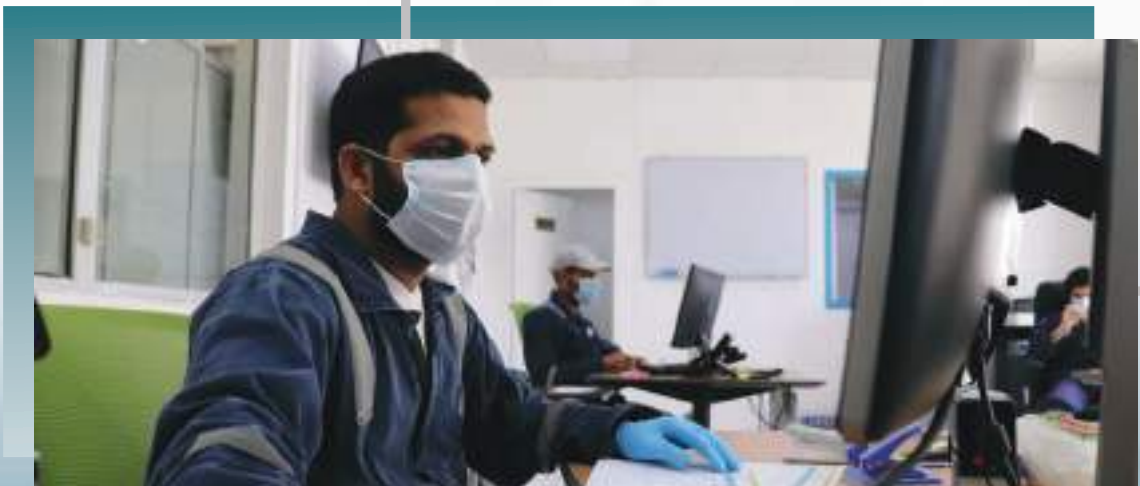
**4706**



### 3. Production

The average daily production of oil during 2020 amounted to (951) thousand barrels per day against (971) thousand barrels per day in 2019, a reduction of 2.1%. The Sultanate maintained its level of oil production in compliance with the agreement to curb output among the OPEC and non-OPEC producers in order to stabilise the international oil supply and demand.

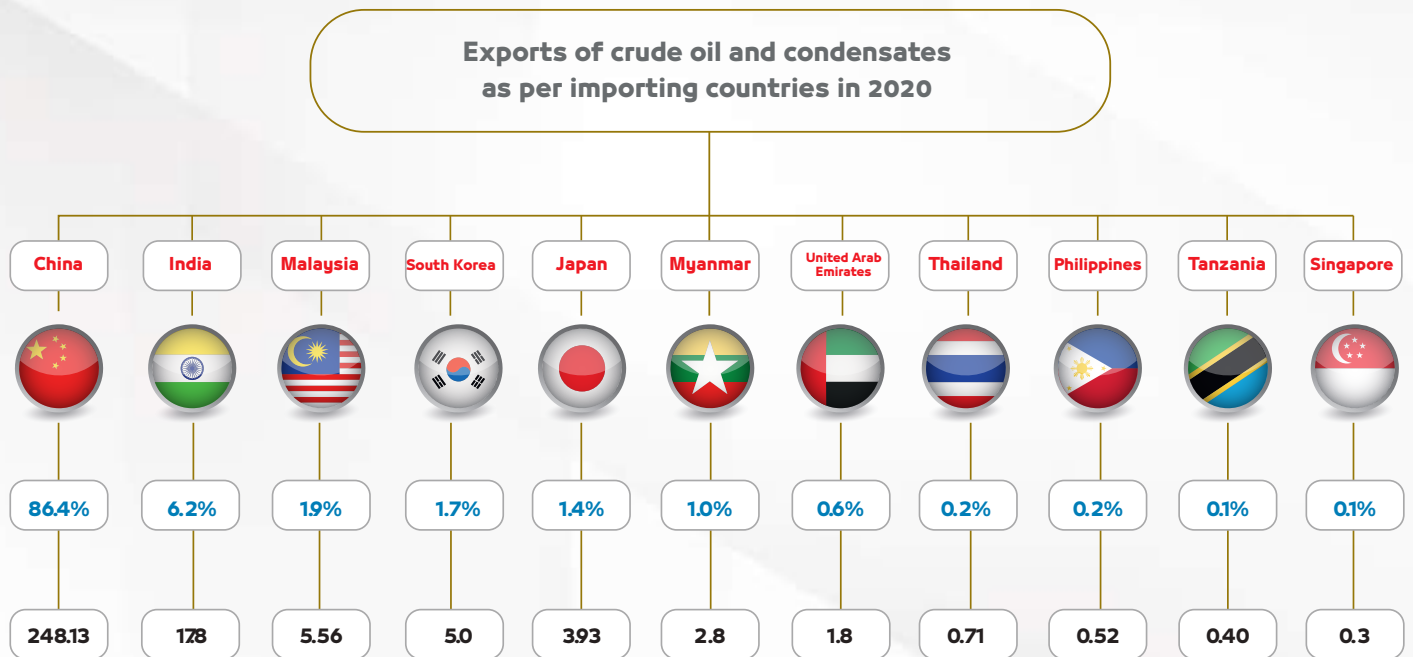
Production of crude oil & condensates at the end of 2020



#### 4. Petroleum & Condensates Exports

The total exports of oil and condensates during 2020 amounted to 287 million barrels. People’s Republic of China topped the list of the countries importing crude oil from Oman; with 86.4% followed by Republic of India with 6.2%, the rest of the countries represented 7.4% of the total exports of crude oil and condensates in 2020.

Exports of crude oil and condensates as per importing countries in 2020

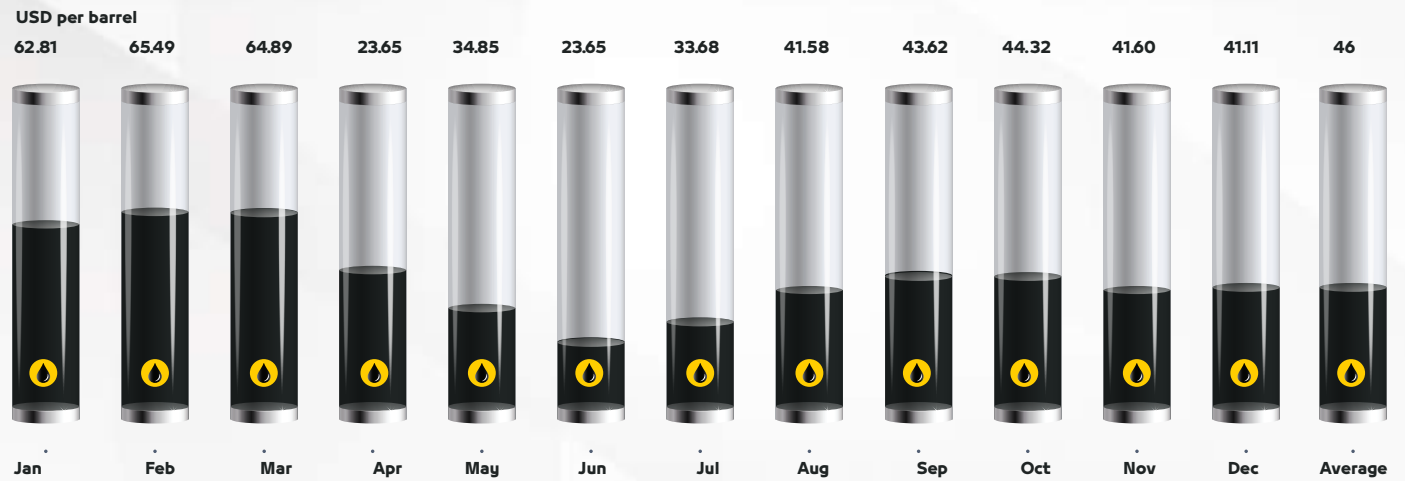


**Total:** 287 Million Barrels



## 5. Price of Omani Crude Oil

In 2020, the average price of Omani crude oil reached USD (46) per barrel, decreasing by 28% against 2019. Omani crude oil prices averaged at a minimum of USD (23.65) per barrel in June and a maximum of USD (65.49) per barrel in February.

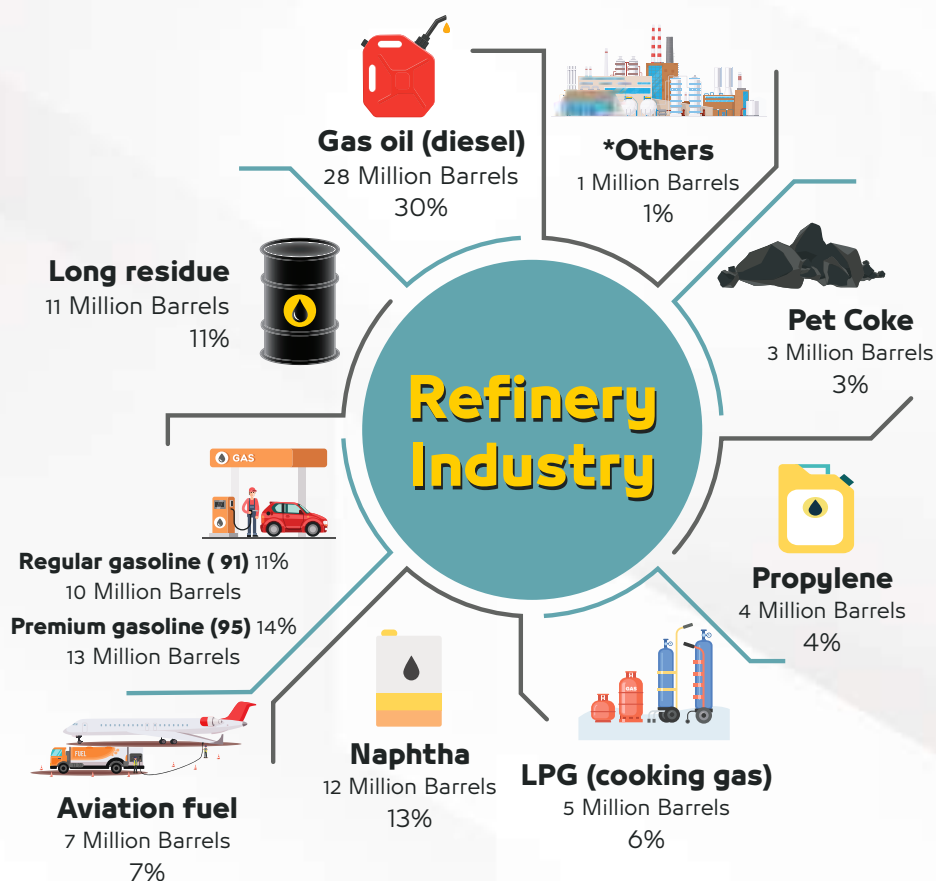


## 6. Refinery Industry

### 6.1 Production:

Total petroleum products output of Oman Oil Refineries and Petroleum Industries Affiliate of OQ Company about 94 million barrels. The contribution of Mina Al Fahal Refinery was 23 million barrels, and Sohar Refinery contribution was 71 million barrels. The production of gas oil (diesel) was about 30% of the total production of the two refineries and industries Affiliate of OQ Company for the year 2020.

Production of Oman Oil Refineries and Petroleum Industries Company



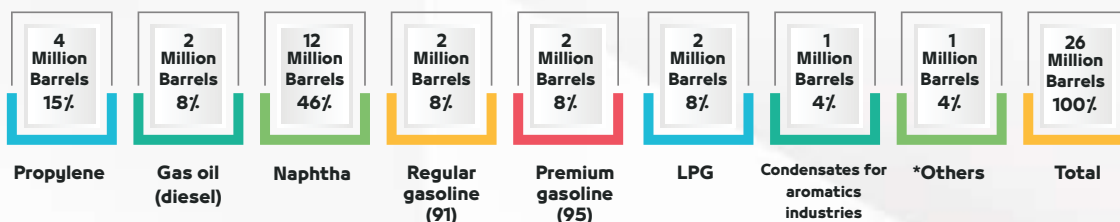
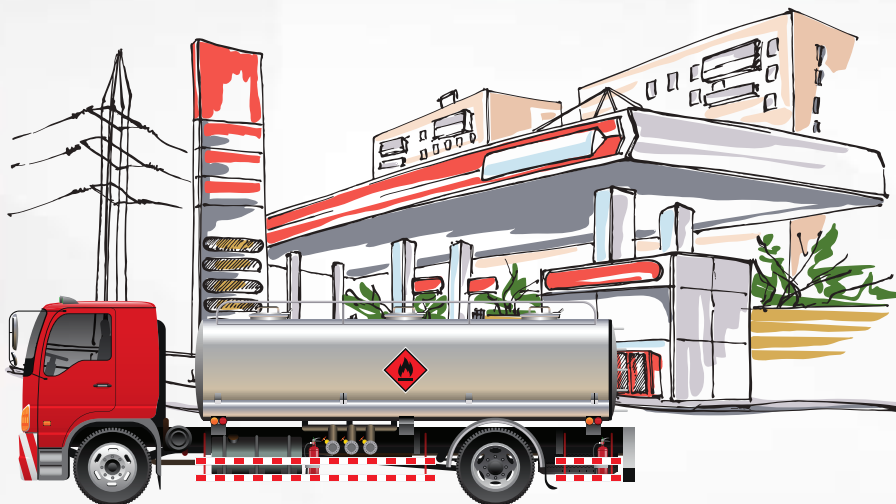
Others Includes: (bitumen, fuel oil, solid sulphur, isomerate, heavy raffinate)



## 6.2 Domestic Sales of Petroleum Products:

The total sales of petroleum products during 2020 is estimated to be 26 million barrels, of which 1 million barrels were sold by Mina Al Fahal Refinery, and 25 million barrels were sold by Sohar Refinery. ORPIC sales of naphtha represents 46% of the total domestic sales of petroleum products in 2020.

Domestic sales of petroleum products of Oman Oil Refineries & Petroleum Industries Company



\*Includes oil jet, solid sulphur, raffinate, isomerate, petroleum products sales to LP complex.

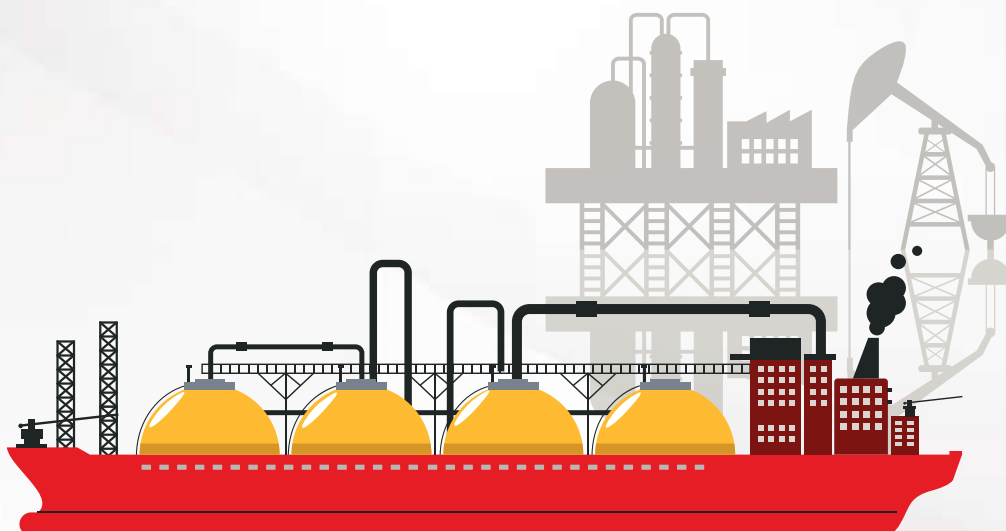
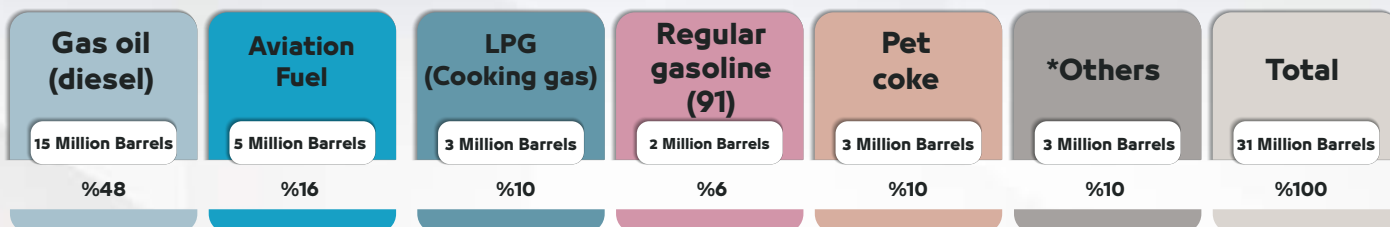
\*Does not include sales to MAF, Raysut Port and Jifnain Station, Residual oil after liquidation (re-injection)



### 6.3 Export Quantities of Petroleum Products:

The total quantities of petroleum products exported during 2020 by Oman Oil Refineries & Petroleum Industries Company through Sohar Refinery is estimated to be 31 million barrels. Exports of gas oil (diesel) represented 48% of the total quantities of petroleum products exported in 2020.

Petroleum products exported by Oman Oil Refineries & Petroleum Industries Company in 2020



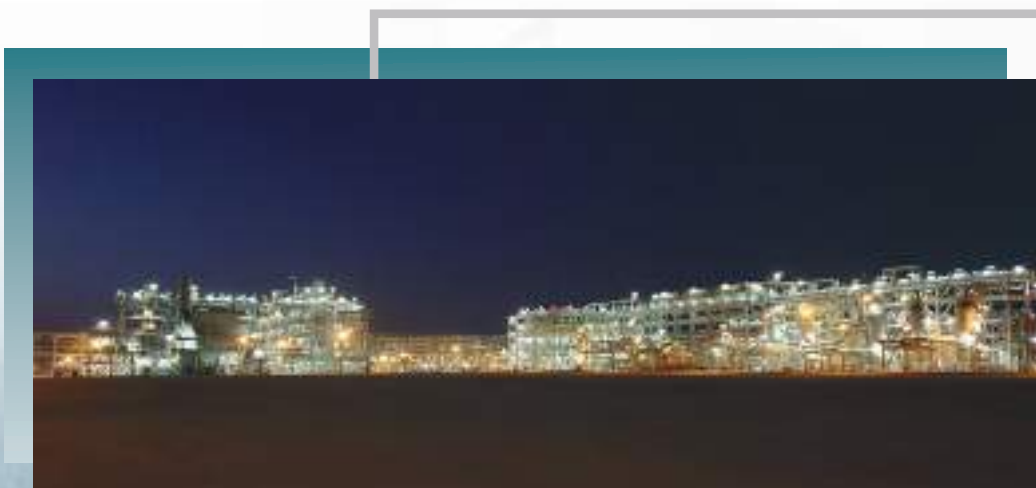
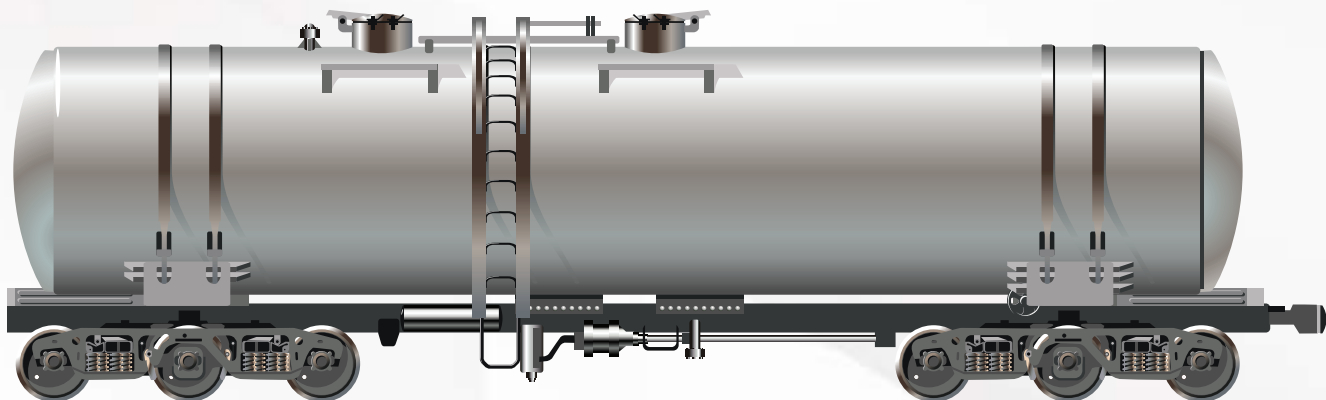
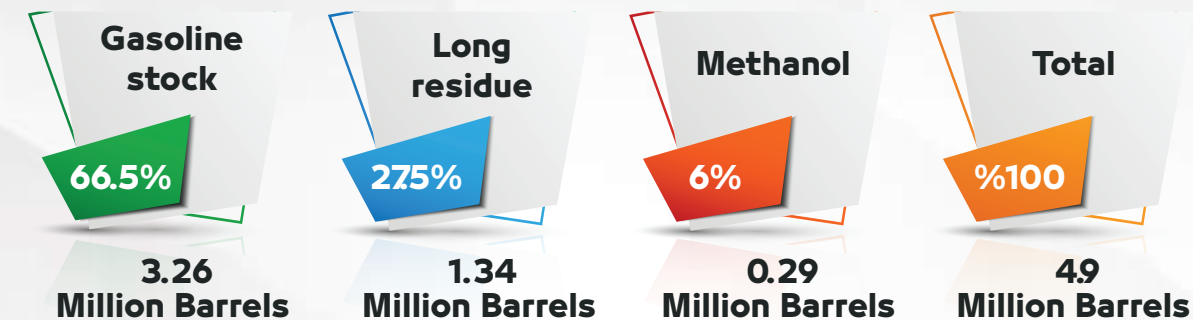
\*Includes :( Premium gasoline (95), sulphur, isomerate, Naphtha)



## 6.4 Imported Quantities of Petroleum Products

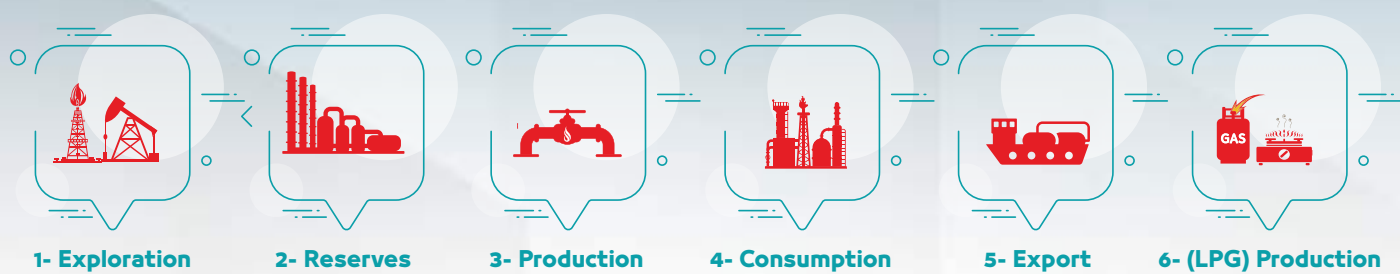
The total quantities of petroleum products imported by Oman Oil Refineries & Petroleum Industries Company through Sohar Refinery during 2020 reached 4.9 million barrels.

Petroleum products imported by Oman Oil Refineries & Petroleum Industries Company in 2020





# GAS SECTOR

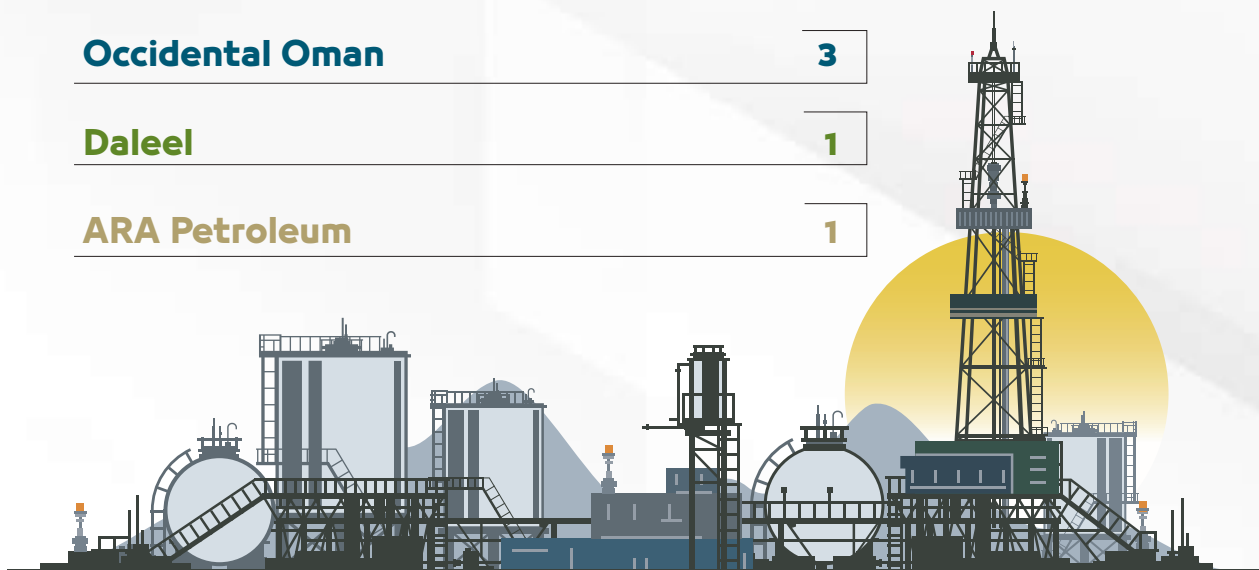


## 1. Exploration

The oil and gas companies operating in the concession areas in 2020 drilled, tested and evaluated 23 exploration and appraisal gas wells, 9 of which were drilled previously, but tested and evaluated in 2020. The analysis and productivity tests in some of the wells showed positive results, adding new gas reserves.

The following table indicates the number of gas exploration and appraisal wells of each company:

<b>Petroleum Development Oman</b>	<b>18</b>
<b>Occidental Oman</b>	<b>3</b>
<b>Daleel</b>	<b>1</b>
<b>ARA Petroleum</b>	<b>1</b>



## 2. Reserves

The total reserves of natural Gas in the Sultanate at end of 2020 is estimated to be 24 trillion cubic feet 55% of which is the estimated reserve of PDO, followed by BP Khazzan and Ghazeer with 40 %, and 5 % of other companies.

### Expected reserves of natural gas at the end of 2020

**Total Expected Reserves**  
**24 Trillion Cubic Feet**



### 3. Production

The Sultanate’s average production of natural gas during 2020 amounted to 122 million cubic metres per day, 16.5% of which was associated gas at an average of 21 million cubic metres per day. Non-associated gas constituted 79.5% of the total production at an average of 101 million cubic metres per day. In addition, natural gas was imported through Dolphin Energy Company at an average of 5 million cubic metres per day.

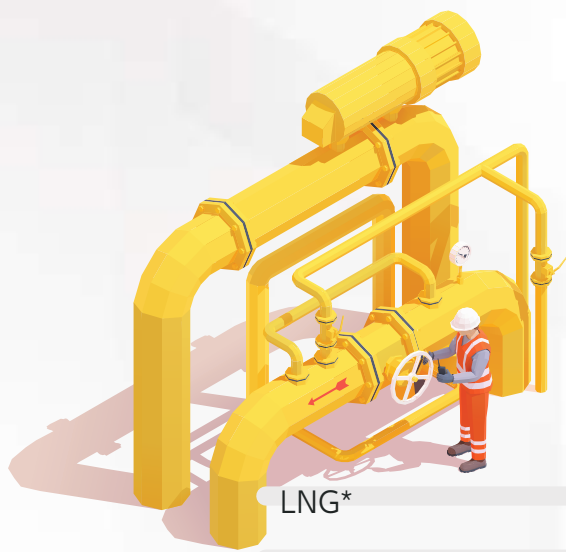
#### Natural gas production and import in 2020

	Production (Million Cubic Metres)	Daily average (Million Cubic Metres)
<b>Total associated gas</b>	<b>7662</b>	<b>21</b>
<b>Total non-associated gas</b>	<b>36950</b>	<b>101</b>
<b>Total production</b>	<b>44612</b>	<b>122</b>
<b>Total import through Dolphin Energy</b>	<b>1920</b>	<b>5</b>
<b>Total production and import</b>	<b>46532</b>	<b>127</b>

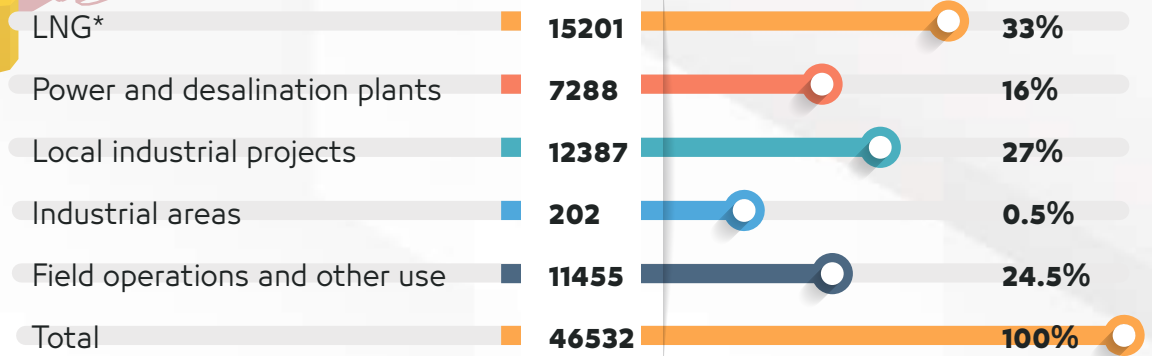


## 4. Consumption

The total consumption of natural gas during 2020 reached 46532 Million cubic metres. Oman LNG and Qalhat LNG projects ranked highest in terms of natural gas consumption, accounting for about 15201 million cubic metres, or 33% of the total consumption in 2020. This was followed by local industrial projects, with 27% consumption, 24.5% for field operations and other uses, and 16% for power and desalination plants. Consumption at industrial areas constituted only 0.5% of the total consumption of natural gas in 2020.



**Consumption of natural gas  
as per consumers (Million Cubic Metres)**

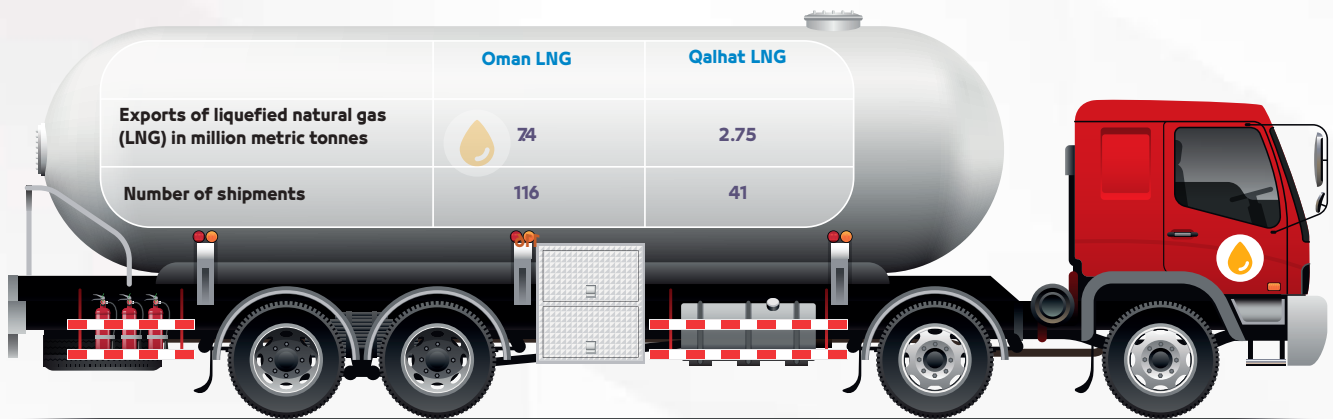


\*Includes Oman LNG & Qalhat LNG

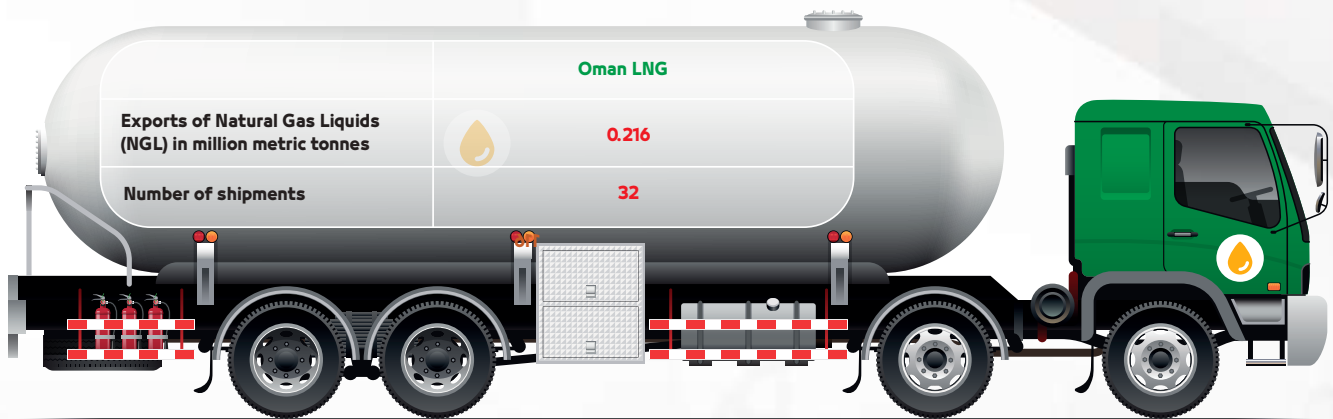
## 5. Export of Liquefied Natural Gas and Natural Gas Liquids

Total exports of LNG during 2020 amounted to 10.2 million metric tonnes in 157 shipments. The export of Natural Gas Liquids were 0.216 million metric tonnes in 32 shipments. At the end of 2020, Oman LNG represented 73% of the total natural gas exports, while Qalhat LNG accounted for about 27% of the total.

### Exports of liquefied natural gas (Million Metric Tonnes)



### Exports of Natural Gas Liquids (Million Metric Tonnes)

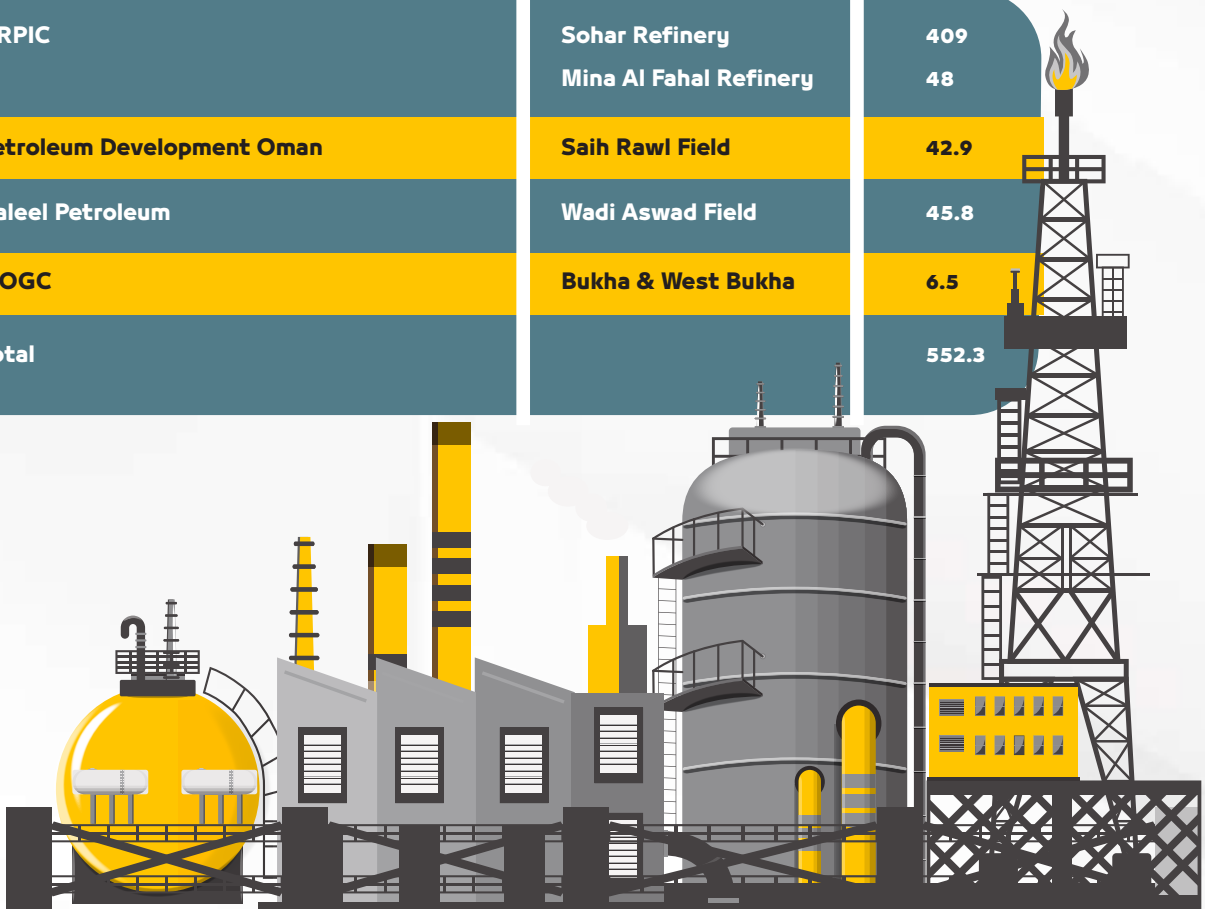


## 6. Production of Liquefied Petroleum Gas (LPG)

The total production of LPG during 2020 reached 552.3 thousand metric tonnes. Quantities produced by Oman Oil Refineries and Petroleum Industries Company (Mina Al Fahal and Sohar) constituted 457 thousand metric tonnes, i.e. 83% of the total LPG production, followed by 17% for the rest of the companies.

### Production of liquefied petroleum gas by source & quantity

ORPIC	Sohar Refinery	409
	Mina Al Fahal Refinery	48
Petroleum Development Oman	Saih Rawl Field	42.9
Daleel Petroleum	Wadi Aswad Field	45.8
MOGC	Bukha & West Bukha	6.5
Total		552.3



# Major Projects in the Oil & Gas Sector

It is essential for the Ministry of Energy and Minerals to retain the nation's position as an industry leader in the oil & gas sector; demonstrating the capacity to cope with new developments and ensure sustainable oil and gas production. Operators are, therefore, keen on field development and continuous improvement by adopting the latest technologies and initiating new projects, which ensure quality and maintain continuity of production. The following are the major oil and gas projects undertaken by operators:

## **Petroleum Development Oman**

The major highlight was the commissioning of the Amin 100-megawatt Solar Plant three months ahead of target. The Independent Power Producer renewable project provides power for the Interior operations and is one of the world's first utility scale solar projects to have an oil and gas company as the sole buyer of electricity. The installation was built and commissioned in record time, just under 12 months after the signing of the engineering, procurement and construction contract. We also conducted a feasibility study with a view to commissioning a wind farm by 2023 as part of the transition to renewable energy. Met masts were erected at six potential sites in the South of Block 6 to gather wind speed, temperature and humidity data over at least a 12-month period. The Yibal Khuff mega project, the most technically complex in our history, was 96.3% complete at the end of 2020, with a daily production rate of around six million cubic meters of gas and 10,000 barrels. The project, which is expected to be delivered well within budget, had achieved 46 million Lost Time Injury free man-hours over a two-year period at the time of writing.

Meanwhile, a major efficiency drive has led to a US\$1.1 billion reduction in portfolio unit development costs, with a US\$830 million saving from the five-year oil programme window.



## Occidental Oman

The 2020 program resulted in 4 discoveries with 67 percent success rate for the year. Processing of 2,270 km<sup>2</sup> of new 3D wide-azimuth seismic data were successfully completed in Block 65, which was acquired in 2019.

The 2020 Mukhaizna Facilities work focused on well hookups and off-plot infrastructure, facility improvement projects, permanent power conversions, and debottlenecking scopes. As part of the Permanent Power project, 66 wells were converted to permanent power from diesel generators.

In addition, off plot laterals, headers and on plot facilities were installed to support production of 19 new Thuleilat wells and to hookup 16 wells to the Casing Vapor Recovery (CVR) network.

Several debottlenecking projects were also pro-

gressed at the production facilities and in the off plot gathering infrastructure.

Oman North 2020 program primarily focused on Developing Production Gathering Facilities by expanding Safah South Wedge E area, Water Flood EOR Surface Facilities, progressing additional Gas Compression Facilities and Conversion of diesel-powered wells to electric power. The program expanded Safah South Wedge E gathering capacity by an additional 15,000 BPD to support development drilling in this area. Additionally, 63 wells were hooked up to permanent power, enabling around US\$ 13 MM reduction in future OPEX.



## Daleel Petroleum:

### AP Gas Recovery Project

As Daleel is continuously improving its commitment toward QHSSE, more improvements planned to be added to the natural gas recovery facilities to reduce the flared gas volumes. In fact, AP gas recovery project aims to reduce the greenhouse gas emissions and utilize the recovered gas, with the aspiration of reaching Zero gas flaring. This project is expected to be completed by 2022.

## BP

Project name: Block 61 Phase 2, Ghazeer gas field

Purpose and objectives: The gas from Ghazeer will contribute towards Oman's 2040 vision in terms of providing additional energy to local industries as well as diversifying the economy. Total production capacity from Block 61, comprising both Khazzan and Ghazeer, is expected to rise to 1.5 billion cubic feet of gas a day and more than 65,000 barrels a day of associated condensate. With an estimated 10.5 trillion cubic feet of recoverable gas resources, the block has the capacity to deliver approximately 35% of Oman's total gas demand.

Progress: the project began production on October 2020

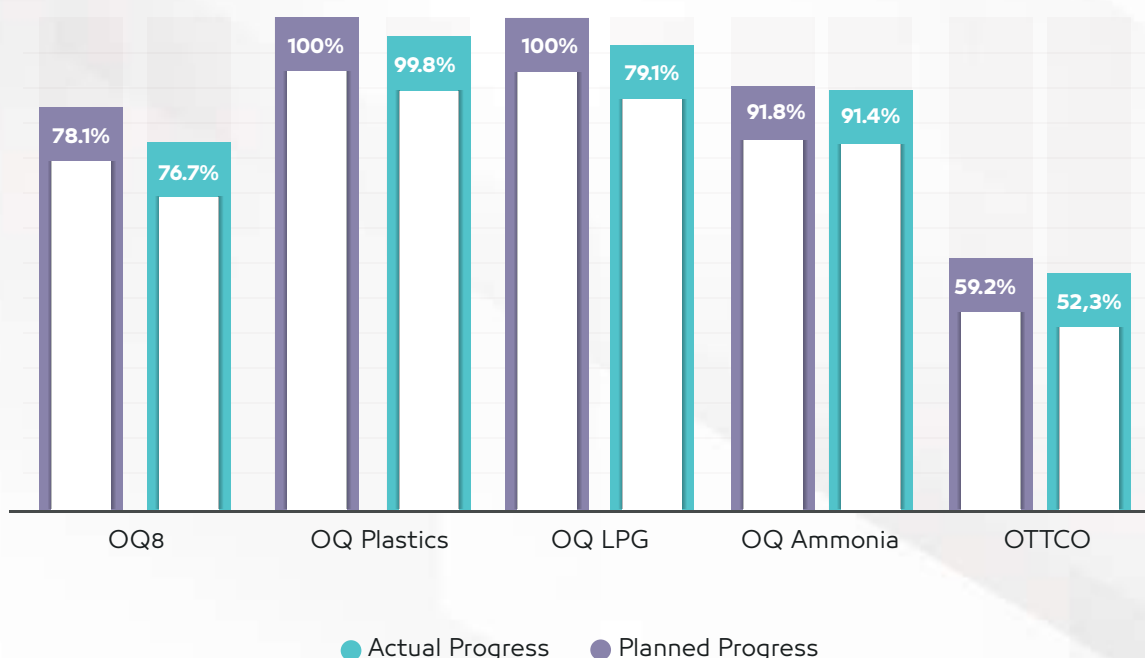
Its impact on Omanization, job creation and ICV: As this important first gas milestone is achieved, Omanisation in bp Oman reached over 80%. Omani-registered companies were also used for over 85% of all project spend.



Any other achievements related to these projects: Green completing Ghazeer’s wells: Adopting experience from bp’s onshore operations in the US, Ghazeer’s wells were tested and completed using the ‘green completions’ concept. Historically, hydrocarbons produced during well testing for new completions would be flared. In green completions, the hydrocarbons are routed to the production facility instead, reducing greenhouse gas emissions. Since adopting this approach in 2019, 201,000 tonnes of CO2e emissions were saved – equivalent to removing 44,000 cars from the road for a year.

**OQ**  
All growth projects made good progress in 2020, albeit, at a slower pace than expected. All projects were challenged by the various restrictions caused by COVID-19 pandemic in one way or the other.

### PROJECTS PROGRESS



**OQ8**  
OQ8 is a JV refinery project located in the Special Economic Zone Authority of Duqm (SEZAD), 600 km south of Muscat on the Arabian Sea coast of Sultanate of Oman. Once the refinery is completed, it will have the capacity to process around 230,000 barrels of crude oil per day. Diesel, jet fuel, naphtha LPG, Sulphur and Petcoke are to be its primary products. The cumulative progress at the end of 2020 was 76.7%.

**Liwa Plastics**  
Liwa Plastics Industries Complex Project is comprised of a natural gas liquids extraction plant in Fahud, Oman connected by a 300 km 14” NGL pipeline to a new petrochemical complex in the Sohar Industrial Port, Oman. The petrochemical plant will be integrated with the adjacent Sohar Refinery, SRIP and Aromatics plants and will serve as an integrated facility designed to optimize the value-adds derived from crude oil and natural gas resources. At the end of 2020, the project achieved a cumulative progress of 99.8%.



### **OQ Liquefied Petroleum Gas**

LPG project will design, build, operate, and transfer the LPG Extraction plant to produce LPG products. The project will develop the Extraction plant, the storage tanks, the shipping facilities, and the interconnection pipeline system from the existing tie-ins to the extraction plan, to the storage and finally to exporting facilities. Overall progress at the end of 2020 was 97.1%.



### **Ammonia Plant**

Ammonia project, which is being built adjacent to the methanol plant in Salah, will utilize hydrogen rich purge gas generated by the methanol plant as feedstock making it capable of producing ammonia. The ammonia plant is utilizing commercially proven technology from Linde AG holding Haldol Topsoe license and has a design life of 20 years. Overall project progress was reported at 91.4%.

### **OTTCO**

OTTCO Project is developing a self-sufficient, strategically located crude oil receiving and export terminal at Ras Markaz. The Project involves the design, construction, and operation of the following: Offshore Single Point Mooring (SPM) facility to receive, load or unload any size crude oil tanker up to and including VLCCs for OQ8. Associated Infrastructure facilities connected to an onshore booster pumping station via a Pipeline End Manifold, pipelines and onshore infrastructure facilities. At the end of 2020, the Project achieved an overall progress of 52.3%.

## OLNG

Our Major Projects continue to support Oman LNG's mission "To produce, market and deliver LNG safely, reliably and profitably". Despite the challenges of the COVID-19 Pandemic, Oman LNG did not hesitate in completing the year with utmost success. The company continued its Plant Rejuvenation and Power Projects. This enabled it to continue delivering and supplying its partners with clean and reliable sources, and maintain their trust and respect.

The Plant Rejuvenation Project enables Oman LNG to enhance productivity and efficiency. Thanks to adhering to such plans, we were able to reach a production of 10.15 million tonnes in 2020. The ongoing Power and Debottlenecking projects have enabled the production of 4 cargoes sold in 2020, produced through increased efficiency and capacity. A total of 155 LNG cargoes have been loaded from the company's world-class plant in Sur.

In line with its Debottlenecking Project, the company signed an agreement with Baker Hughes which will enable us to increase the plant's capacity to 10%, allowing us to produce 11.4 mmtpa of LNG.

Debottlenecking is defined as the process of highlighting specific areas in production trains, machinery equipment or the workflow configuration that would limit or constrain the flow of product inside the plant. By optimizing plant operations, overall capacity can be raised further. The debottlenecking project comes as part of Oman LNG's far-sighted strategic projects that will boost its efficiency.

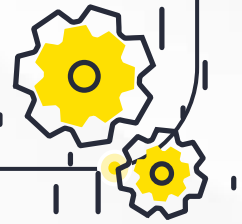
Such projects contribute to enhancing In-Country Value by providing job opportunities and increasing the plant's productivity, leading to stronger support for the local economy and the local youth through internships and training.



# IN-COUNTRY VALUE Programme

The ICV Programme plays an important contribution in enhancing spend in the Sultanate by providing the necessary support to help develop local companies, boost their capabilities and increase the production of local goods and services. In addition, the ICV Programme places key emphasis on the development of human resources through training and qualification aimed at enhancing the Omanisation percentage in the sector to ensure long-term sustainable and comprehensive development.

In spite of the current challenges and difficulties imposed by the pandemic Covid-19, including its negative impact on the global economy in general and the economy of the Sultanate of Oman in particular, the Ministry of Energy and Minerals in collaboration with Operating Companies continued their ongoing efforts to increase the ICV in the sector. As a result of these continuous efforts, a number of achievements and new projects were implemented in the following fields:



## **Localisation of goods and services:**

In line with the goals and directions of the Government represented by Oman Vision 2040, which aims towards achieving economic diversification through the development and localisation of supply chains of goods and services, a number of new business opportunities were identified and some were operationalised during 2020. These developments will be conducive to enhancing the purchases of goods and services, as well as creating jobs and training opportunities for the national workforce. The following are some of the projects that were awarded during the year 2020:

- Manufacturing of flanges
- Manufacturing of face mask
- Fabrication and services of steam test separators
- Maintenance and repair of low-voltage electric motors

## **Vendor Development Programme (VDP):**

The ICV Programme is consistent with the national objective of supporting, encouraging and developing local companies, including small and medium enterprises working in the oil & gas sector, with the aim of enhancing their competitive capabilities in various fields and enabling national products and services to increase their share in the local market. Accordingly, a number of VDP opportunities were awarded to local companies to support development of their capabilities, some of the most significant are:

- Provision of locally manufactured drill bits
- Forecast management programme
- Metering uncertainty calculation application software
- Virtual meter using Artificial Intelligence for well flow measurement

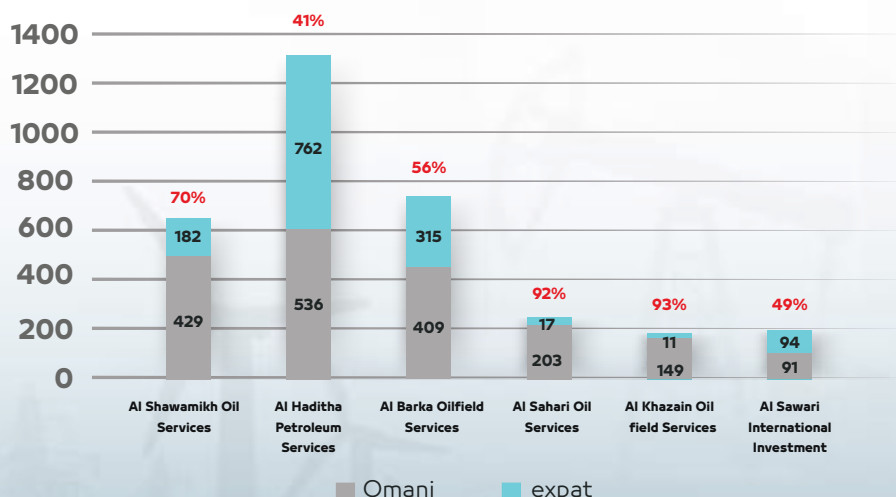


# Super Local Community Contractors (SLCC)

Establishment of Super Local Community Contractors (SLCCs) was developed by the Ministry of Oil and Gas in 2010 and was supported by oil and gas operators. The Super Local Community Contractors are closed joint stock companies that are established by locals from the concession areas. The number of shareholders in these companies as at the end of 2020 stood at 9,700. These companies provide a wide range of basic services including logistics, electrical, equipment rent, road maintenance, civil and construction services, oilfield maintenance and pipelines maintenance. They are playing a key role by diversifying the sources of income for citizens residing in the concession areas, replacing international companies with local companies and providing opportunities to the local companies to move up in the value chain in the oil & gas industry, apart from providing training and jobs & skills development opportunities. Almost 1,800 Omanis are working in these six SLCCs including Al Haditha, Al Baraka, Al Shawamikh, Al Sahari, Al Khazain and Al Sawari. While Al Khazain and Al Sawari have direct contracts with Oxy Oman and CC Energy Development respectively, other companies have direct contract with Petroleum Development Oman (PDO). The value of the awarded contracts to these companies stood at about \$1.4 billion (RO 552.5 million approx.) as of the end of 2020. The oil and gas companies provide support and assistance to the SLCCs to ensure the sustainability of their activities through:

- Appointing a consulting company to assist and guide these companies in developing their business plans, setting health and safety and environmental standards and drafting administrative regulations in line with the standards of the oil and gas industry.
- Seconding experienced staff from operator to help employees at these companies have better understanding the operations of oil and gas sector.
- Training locals living in the concession areas on the necessary skills that qualify them to be employed in these companies.

**Workforce and Omanization percentage at SLCC:**



Company	Concession Areas and states nearby	No of shareholders	(OR) latipaC	Contract Value (In USD millions)	Sponsor	Nature of work
AlShawamikh Oil Services	North concession area Adam - Ibri -Bahla	1615	4,048,783	358	PDO	Hoists
						Pipelines maintenance
Al Haditha Petroleum Services		3030	5,367,288	333	PDO	Flow line replacement
Al Baraka Oilfield Services	South of Concession Area	1297	3,499,990	529	PDO	Hoist
	Shaleem and Halaniyat Island					Flow line replacement
Al Sahari Oil Services	South of concession area	2206	4,751,295	152	PDO	Oilfield maintenance services
	Thumrait and Maqshan					
Al Khazain Oilfield Services	Middle of concession area	1189	4,000,000	65	OXY	Hoist
	Haima & Al Jazir					Logistic services
Al Sawari International Investment	Middle of concession area	371	473,390	*80	CCED	Logistic services
	Duqm and Mahout					

\*Total contract value from 2018- 2023

# Corporate Social Responsibility (CSR)

Committed to the UN Sustainable Development Goals (SDG) and community success, the Ministry of Energy and Minerals (MEM) continued its efforts to oversee Corporate Social Responsibility (CSR) projects and activities by the operating oil and gas companies, as part of the agreed Oil & Gas CSR (OG-CSR) Framework to ensure that these efforts meet the actual needs of the Omani society and yield benefits that enhance sustainability and social responsibility.

In 2020, much of the efforts was directed to support in combating the COVID-19 pandemic and the National Job Security Fund. In addition, the Oil & Gas operators delivered many noteworthy CSR achievements.

The OG-CSR Committee at MEM had approved two joint CSR projects, which were funded by Petroleum Development Oman (PDO), Occidental Oman, BP Oman, OQ, Daleel Petroleum and CC Energy Development. The two projects are progressing well according to plan.



## 1. Outward Bound Oman Center in Al Jabal Al Akhdar

The Outward Bound Oman Center in Al Jabal Al Akhdar is an important project aimed to create an interactive environment that attracts young people, with a unique opportunity to learn, train and gain practical experience. With more than three months of construction, all groundwork including laying down the foundation and Ground Floor slab and starting work on First Floor and Block-2 have been completed. The project is on schedule, with about 25% progress without any HSE incident. The expected completion date is end of September 2021.

## 2. Establishment of professional workshops for people with special needs

The project aims to enhance the efforts of the Ministry of Social Development to integrate people with special needs in the society helping them to be active members and participate in the development of the Omani economy by providing them with employment opportunities that fit their personal capabilities and skills. The project of constructing four vocational workshops for people with special needs in Wilayat Al Rustaq, Nizwa, Al Mudhaibi and Salalah was kicked-off. Construction work in Salalah and Al Rustaq workshops commenced and the foundations in both locations the foundations were completed. Meanwhile, the detailed drawings for Nizwa and Al Mudhaibi workshops are being finalized to progress shortly.









## A Glimpse of the social responsibility role of Oil and Gas companies

As part of their CSR commitment, the Oil and Gas companies in Oman have allocated resources towards effective social contribution. A number of CSR projects and initiatives have been achieved in various geographical areas across the Sultanate and communi-

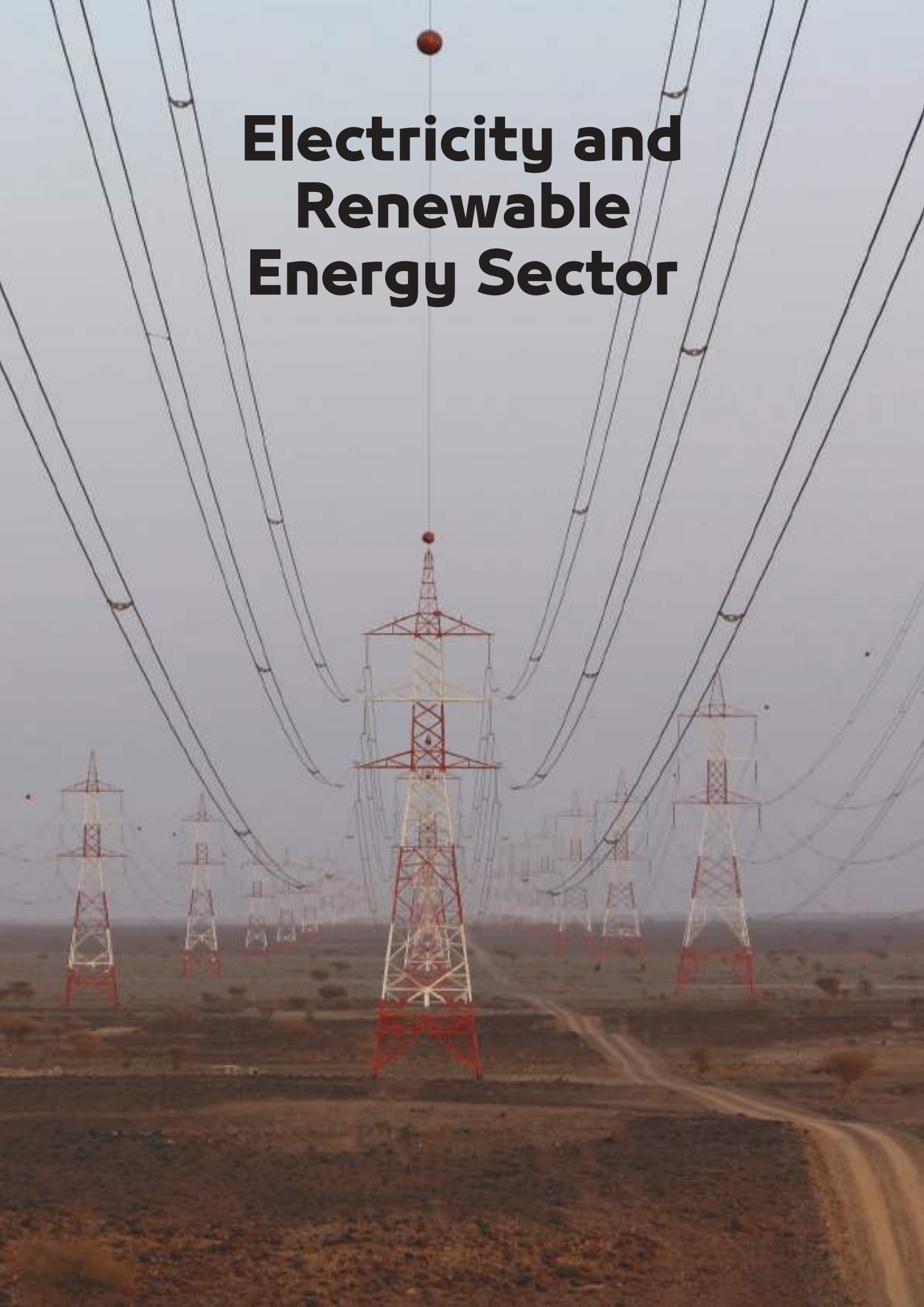
ties targeting a large number of beneficiaries.

The projects focus on key priorities such as education, health, youth, sports, rehabilitation of people with special needs in addition to small and medium enterprises (SMEs) and entrepreneurship. The following table shows the **CSR efforts of major oil and gas companies in 2020:**

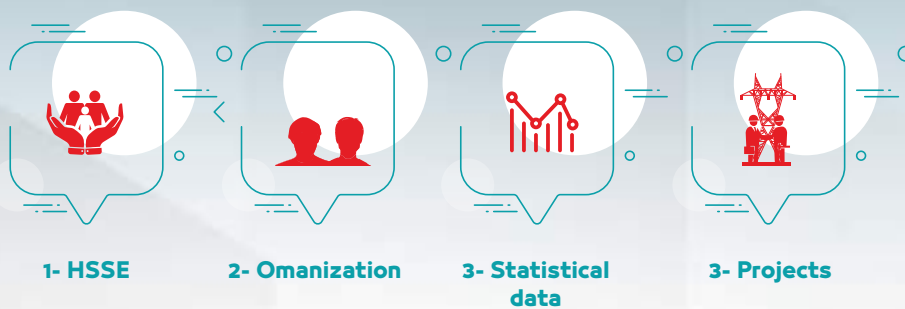
Company Name	Some of CSR Projects	Total Social Investment (\$ Million )
	<ul style="list-style-type: none"> <li>• Provision of medical equipment for hospitals (CT Scan in Masirah Hospital</li> <li>• Echocardiography machine for Al-Nahdha Hospital and Orthopedic Services in Khoula Hospital</li> <li>• Omar Bin Al Khattab institute expansion project</li> </ul>	<p><b>4.74</b> <b>(\$ Million )</b></p>
	<ul style="list-style-type: none"> <li>• Establishment of Autism Center in Muscat.</li> <li>• Providing insolation ward in Sur Hospital.</li> </ul>	<p><b>4.1</b> <b>(\$ Million )</b></p>
	<ul style="list-style-type: none"> <li>• Establishment of Autism Center in Ibri.</li> <li>• Technology Development program for entrepreneurs.</li> </ul>	<p><b>7.8</b> <b>(\$ Million )</b></p>
	<ul style="list-style-type: none"> <li>• Digitalizing Omani curriculum</li> <li>• Sail free program for Oman Paralympics</li> </ul>	<p><b>5</b> <b>(\$ Million )</b></p>
	<ul style="list-style-type: none"> <li>• Renovate livestock and fruit/vegetables markets in Adam</li> <li>• Support SQU study on convalescent Plasma for COVID-19 treatment</li> </ul>	<p><b>1</b> <b>(\$ Million )</b></p>
	<ul style="list-style-type: none"> <li>• Building Eid Chapel in Hamraa Al Doruo.</li> <li>• Building common health walkway in Al Dhahira</li> </ul>	<p><b>1</b> <b>(\$ Million )</b></p>
<p>OQ</p>	<ul style="list-style-type: none"> <li>• Establishment of Autism Center in Dhufar.</li> <li>• Building of two Innovation Centre in Ibri and ALBuraimi</li> </ul>	<p><b>2.9</b> <b>(\$ Million )</b></p>
<p>ARA petroleum</p>	<ul style="list-style-type: none"> <li>• Participation with 2000 trees in 10 million trees planting project.</li> <li>• Building a modern digital studio in Al Buraimi.</li> </ul>	<p><b>52</b> <b>(\$ Thousand )</b></p>



# **Electricity and Renewable Energy Sector**



# Electricity and Renewable Energy Sector



## 1- Health, Safety, Security and Environment \*

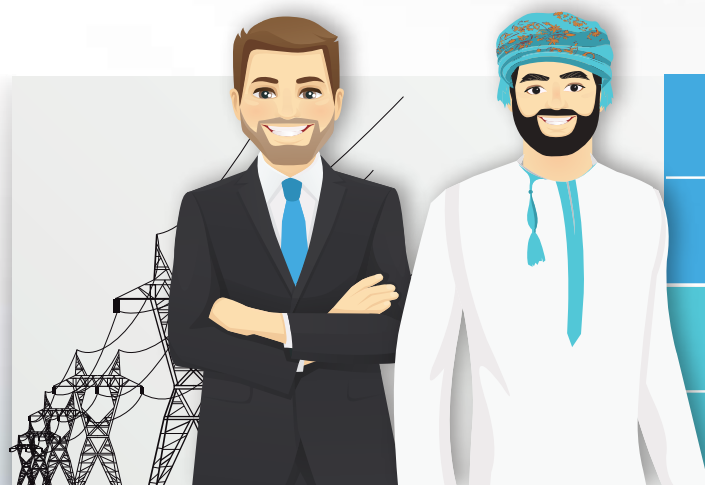
Health, safety, security and environment statistics in the electricity and renewable energy sector for the years 2020 and 2019.

Statement	Fatalities	Lost Time Injuries	Motor Vehicle Incident (MVI)	Hours worked (in millions)	Kilometers driven (in million)
2019	3	5	26	39	61.5
2020	0	6	6	376	65.6

\*Includes Nama group only

## 2. Omanisation

Workforce and Omanisation percentage in the sector for the year 2020

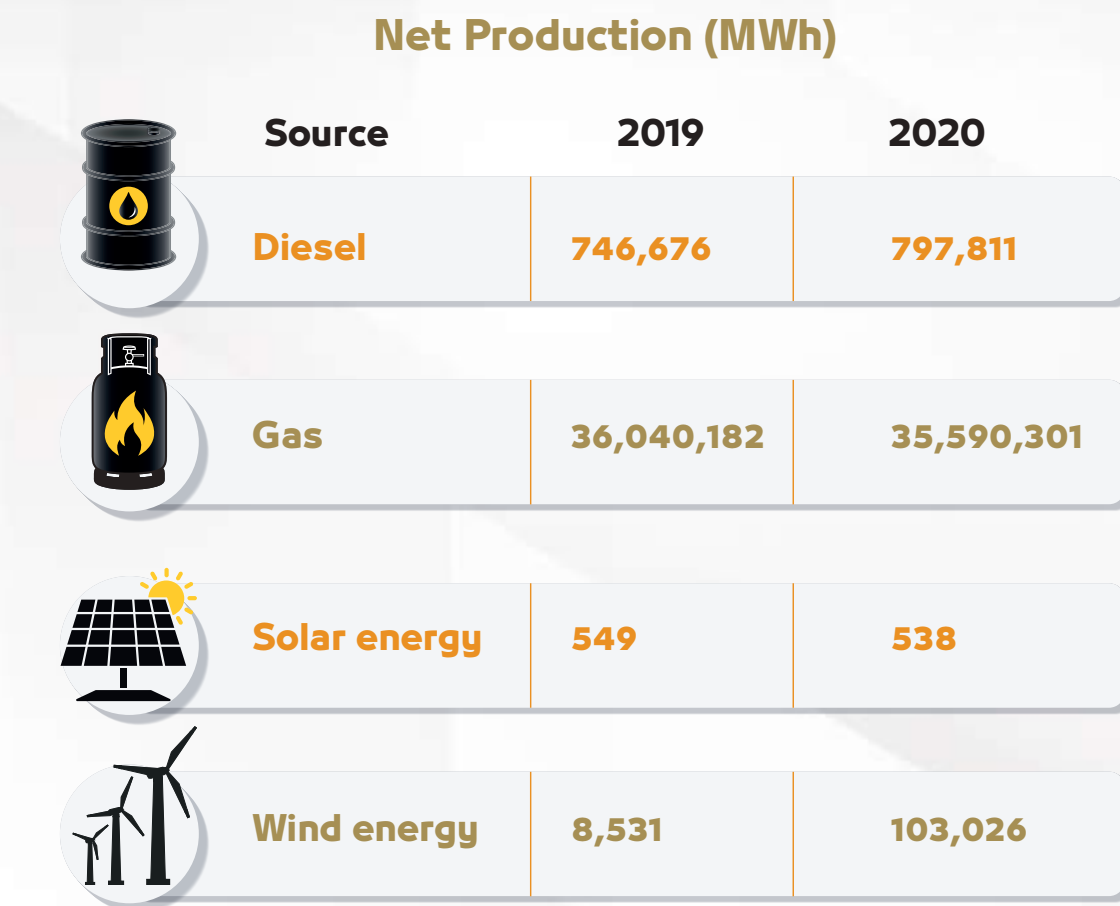


Expats	Omanis
153	2546
<b>Total</b>	<b>2699</b>
<b>Omanisation</b>	<b>94%</b>

### 3. The electricity sector Statistics for the year 2020

As a result of the national economy’s acceleration and growth, other industries, particularly the energy sector, have experienced growth as well (electricity and renewable energy). In 2020, natural gas accounted for 98% of the energy sources used to produce electricity in net Production of 35,590,301 MWh. On the other hand, diesel accounted for roughly 2% of the total energy sources used to generate electricity. The Sultanate aims to raise the share of renewable energy in electric energy production and, therefore, reduce reliance on natural gas, which helps to protect the environment by lowering total emissions on one hand and diversifying energy sources on the other.

The following figure illustrate the net production according to its sources:



The Electrical Networks’ installed capacity amounted to 11577.41 MW and accordingly, the total energy supplied to all electrical networks amounted to 38,333 gigawatt-hours. The lengths of the electrical lines, including electrical transmission lines and distribution lines, reached 95,153.67 kilometers, including overhead wires and ground wires at all levels of high and low voltage. The Main Interconnected System (“MIS”) peak load is 6401 MW, whereas, the Dhofar Power System (DPS) peak load is 559 MW.

### 4. Electricity and Renewable Energy Sector Projects:

#### - North-South Interconnection Project

The North-South interconnection project is one of the most important projects that will connect four basic electrical networks, namely, the main network, PDO network, rural areas network and Dhofar network, which will contribute to raising the efficiency of networks and replacing diesel with gas as well as optimizing gas consumption to produce electricity. The project is recognized as one of Nama Group’s most important strategic initiatives. The project is divided into two phases:

#### Phase I:

This includes 660 kilometers of overhead electricity lines with a capacity of 400 kV, divided into five main stations at Nuhaida, Barik, Suwaihat, Duqm and Mahout, all of which will help to build industrial and economic hubs in Tanweer's concession areas. Recently, all engineering, construction and procurement works for overhead lines and stations were awarded within the first phase of the project.

#### Phase II:

This stage spans 425 km of 400 kV electrical network from Suwaihat to Ateen, connecting three electrical stations; Suwaihat station that belongs to Oman Electricity Transmission Company (OETC) in the block 6 of Petroleum Development Oman (PDO), with Harweel and Ateen stations.

#### - Ibri II Solar Power Project

Ibri II Solar Power Project, which has a capacity of 500 MW, was launched in 2018 and was assigned to a consortium entailing ACWA Power, Gulf Investment Corporations and Alternative Energy Projects in 2019. The project is currently under construction and is expected to start commercial operation during the third quarter of 2021.

#### - Manah Solar I & II IPPs

The private sector will develop, own and operate these two projects. Financing, procurement, design, construction, operation and maintenance are all part of the scope of business. Manah Independent Power Plant I and II will be developed at two adjacent sites in Al Dakhiliyah Governorate, with each project having a 500 MW generation capacity. Commercial operations are scheduled to begin in the fourth quarter of 2023 and the first quarter of 2024, respectively.

#### - Wind Resource Assessment Campaign (WRAC)

Winds continue to blow over some areas of the Sultanate with a force sufficient to generate electricity, particularly in the most important coastal states such as Sur, Jalan Bani Bu Ali, Duqm, Shaleem and Sadah. The sites are currently being reviewed for a year after which, the project to produce 200 megawatts of electricity will begin. For the Wilayats of Jalan Bani Bu Ali and Duqm, data was collected and analysed, and work is currently underway to collect data for the remaining locations.

#### - Dhofar Wind Farm

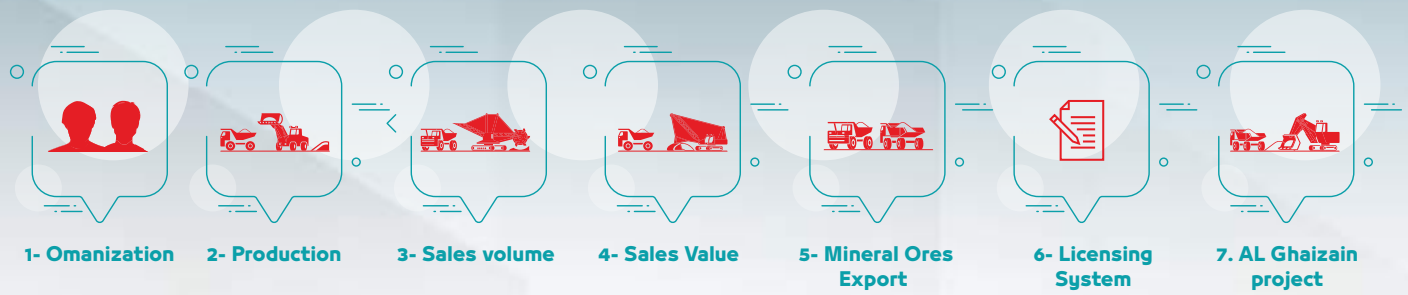
The Dhofar Wind Project is the first large-scale wind farm in the GCC. The project is located in Fatkhit, Dhofar Governorate. The Dhofar Wind Farm consists of 13 wind turbines with a production capacity of 50 megawatts. The project was successfully built and commercial operations began in late 2019.



# Minerals sector



## Minerals Sector



### 1. Omanization

The ministry is aiming to attract more Omanis especially young talented Omanis to the mining sector. In 2020, the percentage of Omani workforce is 22% of the total workforce in the sector, which is equal to the total workforce of the sector in 2019.



**Expatriate**

**78%**



**Omani**

**22%**

## 2. Production

The Mineral production indicators have witnessed a decline in the production amounts in some types of mineral ores approximated as 5 million tons (19%) compared to last year, resulted from the decline in the limestone production with an amount of 3 million tons (32%) of the total production.

The production of the building material has also declined 16% comparing to last year. These declines are due to the lack of demand upon these materials in addition to the delay of the companies' submission of their monthly production reports. 145 mining companies have recorded with missing production reports.

On the other hand, the field quartz and kaolinite production have increased compared to last year.

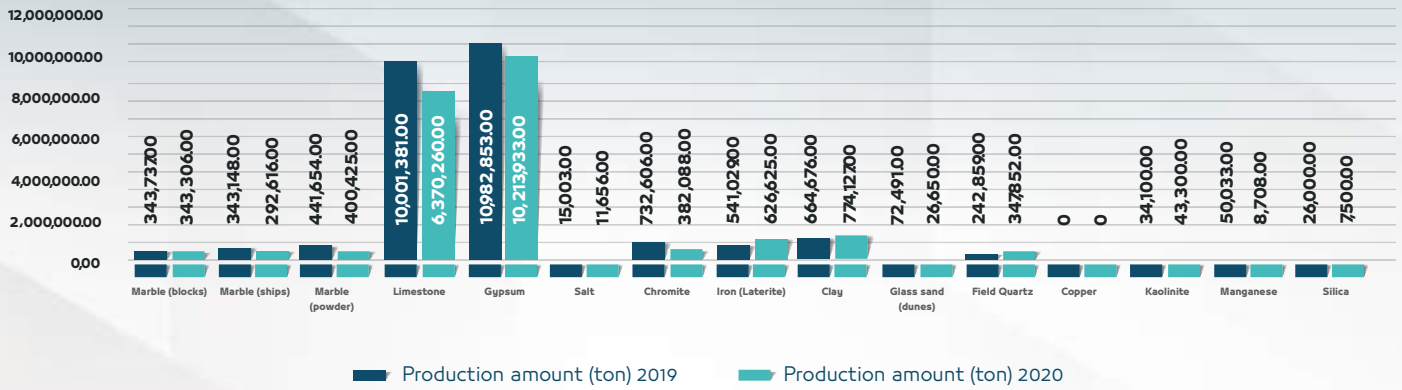
Comparison of production amounts in 2019 and 2020

Mineral	Production amount (ton)		The change	
	2019	2020	Amount	Rate
Marble (blocks)	343,737.00	373,306.00	29,569.00	9%
Marble (ships)	343,148.00	292,616.00	-50,532.00	-15%
Marble (powder)	441,654.00	400,425.00	-41,229.00	-9%
Limestone	10,001,381.00	6,370,260.00	-3,631,121.00	-36%
Gypsum	10,982,853.00	10,213,933.00	-768,920.00	-7%
Salt	15,003.00	11,656.00	-3,347.00	-22%
Chromite	732,606.00	382,088.00	-350,518.00	-48%
Iron (Laterite)	541,029.00	626,625.00	85,596.00	16%
Clay	664,676.00	774,127.00	109,451.00	16%
Glass sand (dunes)	72,491.00	26,650.00	-45,841.00	-63%
Field Quartz	242,859.00	347,852.00	104,993.00	43%
Copper	0	0	0	0%
Kaolinite	34,100.00	43,300.00	9,200.00	27%
Manganese	50,033.00	8,708.00	-41,325.00	-83%
Silica	26,000.00	7,500.00	-18,500.00	-71%
<b>Total</b>	<b>24,491,570.00</b>	<b>19,879,046.00</b>	<b>-4,612,524.00</b>	<b>-19%</b>

Comparison of building material production in 2019 and 2020

Mineral	Production amount (m3)		Change	
	2019	2020	Amount	Rate
Building material	57,667,894.00	48,349,915.00	-9,317,979.00	-16%

## Production amount (ton)



## Building Material

- ▬ Changed Amount
- Production amount (m3) 2020
- Production amount (m3) 2019

**-9,317,979.00**

**48,349,915**

**57,667,894**





### 3. Sales volume

The sales volume index has dropped by 13% compared to last year, with an approximate volume of 3 million tons due to the limestone decline with an amount of 2 million tons (39%) of the total previous sold mineral ores. The Gypsum mineral represents a percentage of 46% of the total sold ores. On the other hand kaolinite sales have recorded a slight arise of 22% compared to last year. The building material sales volume has dropped off 25% compared to last year.

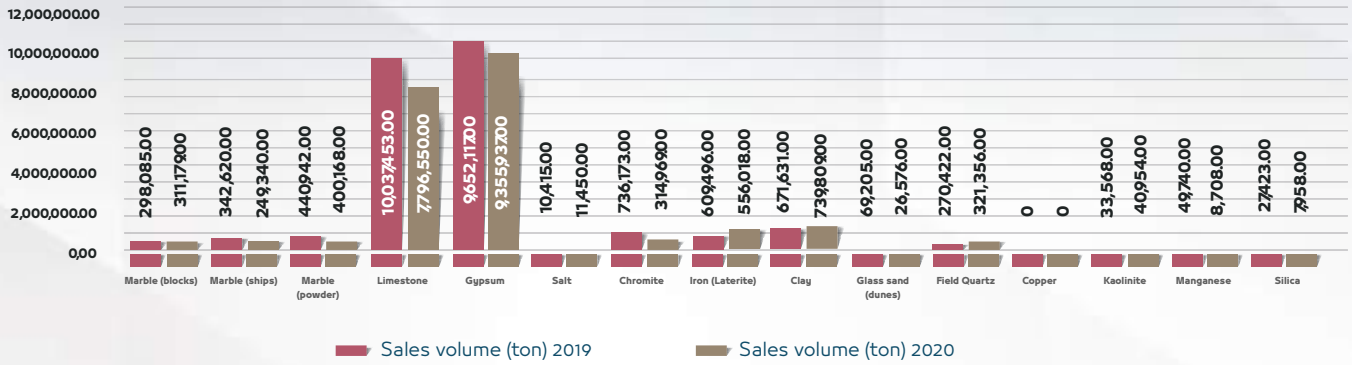
Comparison of sales volume in 2019 and 2020

Mineral	Sales volume (ton)		Change	
	2019	2020	Volume	Rate
Marble (blocks)	298,085.00	311,179.00	13,094.00	4%
Marble (ships)	342,620.00	249,340.00	-93,280.00	-27%
Marble (powder)	440,942.00	400,168.00	-40,774.00	-9%
Limestone	10,037,453.00	7,796,550.00	-2,240,903.00	-22%
Gypsum	9,652,117.00	9,355,937.00	-296,180.00	-3%
Salt	10,415.00	11,450.00	1,035.00	10%
Chromite	736,173.00	314,969.00	-421,204.00	-57%
Iron (Laterite)	609,496.00	556,018.00	-53,478.00	-9%
Clay	671,631.00	739,809.00	68,178.00	10%
Glass sand (dunes)	69,205.00	26,576.00	-42,629.00	-62%
Field Quartz	270,422.00	321,356.00	50,934.00	19%
Copper	0	0	0	0%
Kaolinite	33,568.00	40,954.00	7,386.00	22%
Manganese	49,740.00	8,708.00	-41,032.00	-82%
Silica	27,423.00	7,958.00	-19,465.00	-71%
<b>Total</b>	<b>23,249,290.00</b>	<b>20,140,972.00</b>	<b>-3,108,318.00</b>	<b>-13%</b>

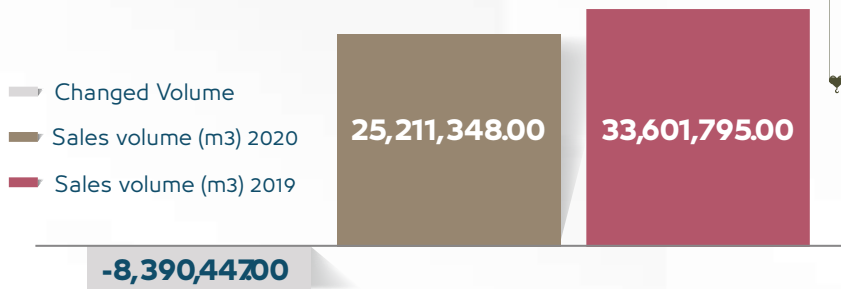
Comparison of building materials sales volume in 2019 and 2020

Mineral	Sales Volume (m3)		Change	
	2019	2020	Volume	Rate
Building material	33,601,795.00	25,211,348.00	-8,390,447.00	-25%

## Sales volume (ton)



## Building Material



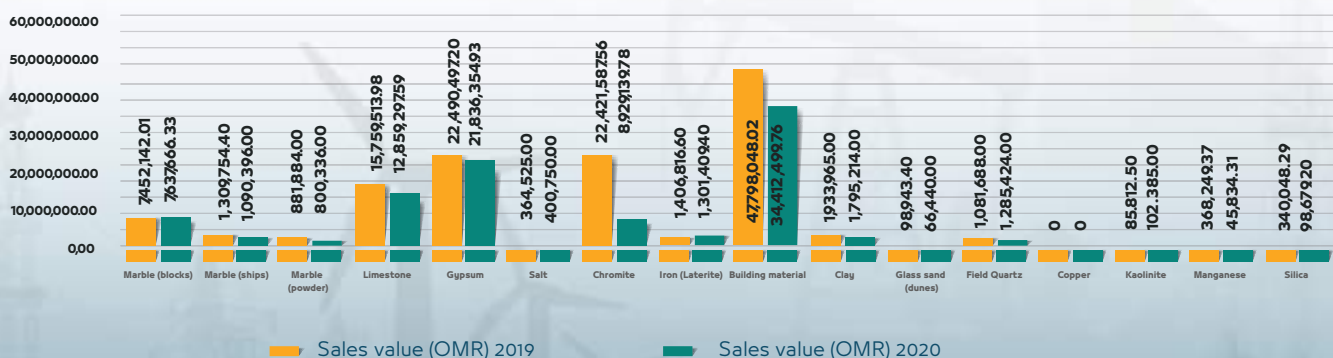
#### 4. Sales Value

The Sales value indicators has recorded a decline in some mineral ores by 31 million O.R (25%) than the last year driven by the decline of the sales value especially in: building material, gypsum, chromium, and limestone. Building materials represents a percentage of 37% of the total sales value, while gypsum represents 24%. On the other hand the kaolinite has recorded (19%) increase in its sales value compared to last year.

Comparison of Sales Value Indicators in 2019 and 2020

Mineral	Sales value (OMR)		Change	
	2019	2020	Change value	Rate
Marble (blocks)	7,452,142.010	7,637,666.33	185,524.32	2%
Marble (ships)	1,309,754.399	1,090,396.000	-219,358.40	-17%
Marble (powder)	881,884.000	800,336.000	-81,548.00	-9%
Limestone	15,759,513.976	12,859,297.593	-2,900,216.38	-18%
Gypsum	22,490,497.200	21,836,354.930	-654,142.27	-3%
Salt	364,525.000	400,750.000	36,225.00	10%
Chromite	22,421,587.561	8,929,139.781	-13,492,447.78	-60%
Iron (Laterite)	1,406,816.600	1,301,409.400	-105,407.20	-7%
Building material	47,798,048.017	34,412,499.757	-13,385,548.26	-28%
Clay	1,933,965.000	1,795,214.000	-138,751.00	-7%
Glass sand (dunes)	98,943.400	66,440.000	-32,503.40	-33%
Field Quartz	1,081,688.000	1,285,424.000	203,736.00	19%
Copper	0.000	0.000	0	0%
Kaolinite	85,812.500	102,385.000	16,572.50	19%
Manganese	368,249.367	45,834.312	-322,415.06	-88%
Silica	340,048.287	98,679.200	-241,369.09	-71%
<b>Total</b>	<b>123,793,475.317</b>	<b>92,661,826.299</b>	<b>-31,131,649.02</b>	<b>-25%</b>

#### Sales value (OMR)



## 5. Mineral Ores Export

The total amount of exported mineral ores in 2020 is approximately 37 million tons recording a decline in the exported mineral amounts of 4% than the last year due to the decreased exported amounts of building materials which felled by 1.1 million tons. At the same time the building material has recorded the highest export amount of 59%, followed by gypsum 24%, then the lime stone 14%, whereas exportation through sea ports has recorded the highest exportation rate 76% compared to the land and air exportation.

Comparison of exported mineral amounts in 2019 and 2020

Type of ore	Amounts 2019 (ton)			Amounts 2020 (ton)		
	land	sea	air	land	sea	air
Building material	11,125,936	11,736,857	0.272	7,701,527	14,027,919	1.519
Gypsum	77,577	8,992,698	-	37,551	8,752,999	0
Laterite	254,401	-	-	225,260	0	0
Kaolinite	-	-	-	3,100	0	0
Stones and powder	19,857	14,301	-	14,292	184,197	0
Limestone	1,806,181	3,232,101	0.072	759,417	4,426,967	1.369
Silica	40	12,000	-	5	2	0
Marble	127,843	153,726	1.268	149,943	180,536	1.201
Chromite	-	601,508	-	80,360	348,013	0
Manganese	-	49,750	-	1,000	6,650	0
Copper	-	-	-	0	0	0
Dolomite	-	268,500	-	10	49,500	0
<b>Total</b>	<b>13,411,835</b>	<b>25,061,441</b>	<b>1.612</b>	<b>8,972,465</b>	<b>27,976,783</b>	<b>4.089</b>
<b>Total</b>	<b>38,473,278</b>			<b>36,949,252</b>		

### Exports as per Shipping Method 2020

sea: 75.71%

land: 24.28%

air: 0.00001%

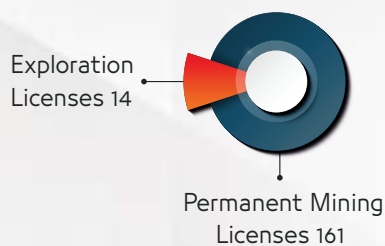


## 6. Licensing System

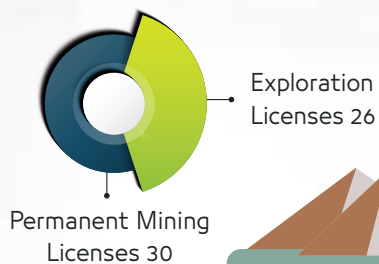
Number of permanent Mining licenses and exploration licenses for the year 2020

Licenses	Permanent Mining Licenses	Exploration Licenses
Number of issued Licenses	30	26
Number of renewed License	161	14

Number of renewed License 2020



Number of issued Licenses



### 6.1 Mining Licenses

Number of Mining License for the year 2020, comparing to the year 2019

Licenses type/ Year	2019	2020
Renewed Permanent Licenses	89	161
Issued New Licenses (Permanent)	21	30
Renewed Project Licenses (temporary)	1	-
Issued Project Licenses (temporary)	12	-

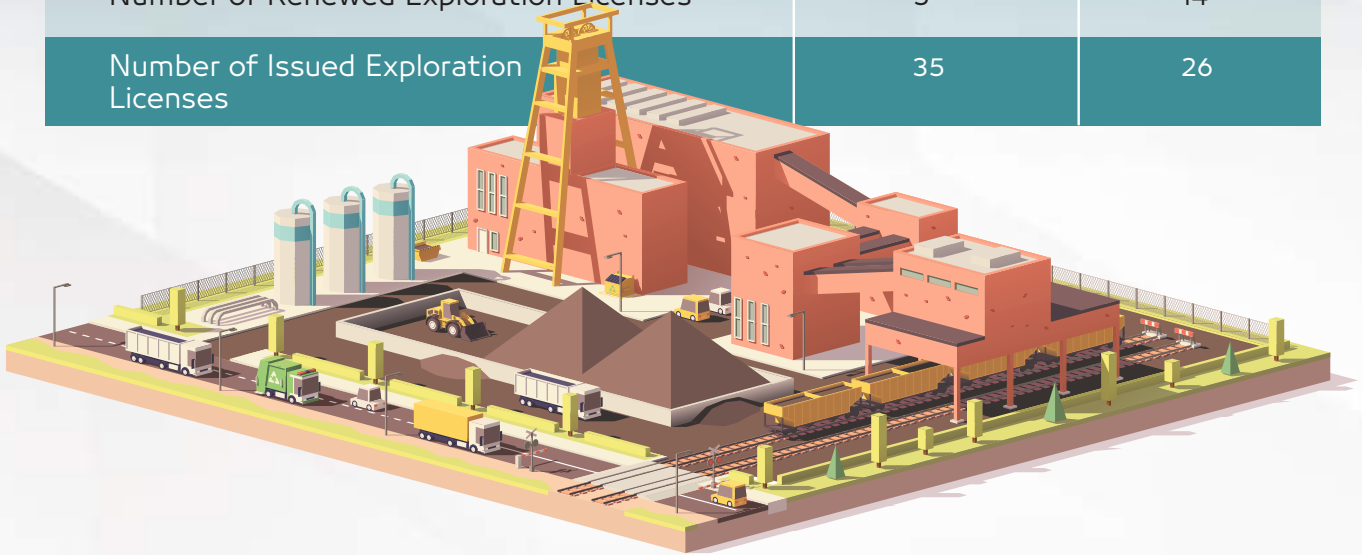
Number of Mining Permanent Licenses issued in 2020 based on governorates



## 6.2 Exploration Licenses

Number of exploration licenses for the year 2020 comparing to the year 2019

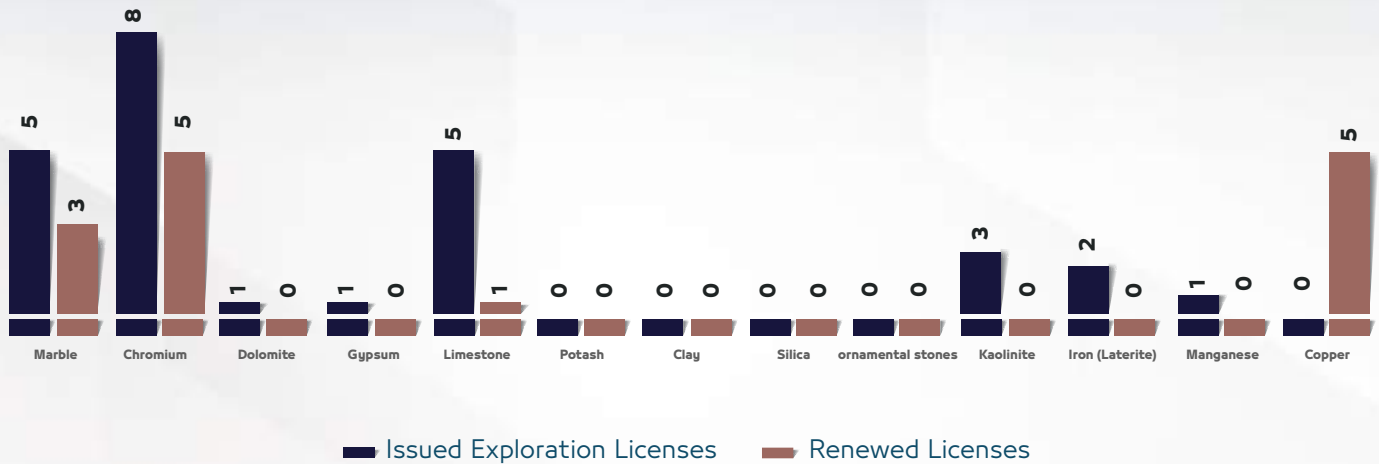
Licenses type/ year	2019	2020
Number of Renewed Exploration Licenses	5	14
Number of Issued Exploration Licenses	35	26



Number of Exploration Licenses for the year 2020 based on Mineral Ores

Mineral Ores	Issued Exploration Licenses	Renewed Licenses
Marble	5	3
Chromium	8	5
Dolomite	1	0
Gypsum	1	0
Limestone	5	1
Potash	0	0
Clay	0	0
Silica	0	0
ornamental stones	0	0
Kaolinite	3	0
Iron (Laterite)	2	0
Manganese	1	0
Copper	0	5
Total	26	14

## Number of Exploration Licenses for the year 2020 based on Mineral Ores



### 7. AL Ghaizain project

AL Ghaizain project is considered as one of the vital projects with an added value. It is one of Tanfeeth Mining lab outputs that was followed up by the Implementation Support and Follow Up Unit. The initial cost of the project is 43 million Omani Rials and it will contribute with 50 direct employment opportunities to Omanis in the first phase. The company is willing to contribute in the development of the local community as the Mineral Wealth Law stipulated to allocate 1% of the annual production as contribution to the local community. The company is also willing to assign contracts and services to the local companies in addition to revitalizing the logistic sector in the Wiliayate. This project has economic and social dimensions due to its location near some villages therefore all stakeholders shall be engaged in all the phases of the project. The engagement started though discussing the project with the competence authorities, and holding some of the companies meetings with locals. The Company has also planned to actively engage the citizens before implementing any activity on the ground.

And due to PAM (by that time) concentration of the continuous engagement of the local community in the different project phases, His excellency the Wali of Al Khaboura have been addressed in order to facilitate the companies implementation to its development program in serving the local community to overcome any local obstacles preventing the establishment of the project.





# Overview of companies in Oil and Gas Sector.





شركة تنمية نفط عمان  
Petroleum Development Oman

## Petroleum Development Oman | 2020 Performance

### PDO Vision

“To be renowned and respected for the excellence of our people and the value we create for Oman and all our shareholders.”

### Introduction

In 2020, PDO navigated a difficult path through the challenges arising from the COVID-19 outbreak and fall in oil and gas prices. Throughout, we remained committed to excellence by creating value across all aspects of our business, achieving key milestones in our main mandate: the safe and proficient exploration and production of hydrocarbons. At the same time, we made tangible strides in our transition to renewables, specifically solar and wind energy.

We also met, and in some cases surpassed, a range of targets to proudly serve Oman.

### In 2020, PDO:

- Provided significant medical, financial and logistical support for the national effort to combat COVID-19
- Booked 102 million barrels of oil and 0.5 trillion cubic feet (Tcf) of non-associated gas as Commercial Contingent Resource volumes
- Achieved its highest ever condensate production
- Commissioned the Amin 100-megawatt Solar Plant project to power our Interior operations
- Recorded significant reductions in greenhouse gas emissions, flaring and waste
- Continued to support communities and job creation through our In-Country Value (ICV) programme.

### COVID-19

A major drive was mounted to support the Government in its efforts to combat the spread of the Coronavirus, while at the same time launching company-wide moves to safeguard the welfare of our staff and contractors and the continuity of our business operations.

We helped Omanise the provision of some vital medical supplies, producing 150,000 litres of hand sanitiser and enabling

the local manufacture and distribution of eight million face masks.

In response to the global shortage of personal protective equipment (PPE) and ventilators, our Medical department also shared a large portion of their PPE supplies, including face masks and shields, goggles, gloves and gowns with both government and non-government health institutions.

Other donated equipment included digital laryngoscopes, ultrasound, ventilators, infrared thermometers, air purifiers, infusion pumps and syringes and cardiac monitors.

Meanwhile, we adopted new work patterns to limit our exposure to the virus and control its transmission as much as possible. All Interior staff and contractors were asked to continue working a double shift to minimise transport movements between the Interior and Coast, supporting the principle of ‘stay safe and contain.’

Minimum staff representation levels were introduced at our coastal offices, with the vast majority of our personnel working from home for the first time, focusing on value-add and essential tasks, after significant upgrades to our IT infrastructure to support remote access.

### Health, Safety and the Environment (HSE)

Safety remains PDO’s overarching priority with an unrelenting focus on Goal Zero – no harm to people, environment and assets.

However, there is no doubt that COVID-19 and social distancing constrained our overall ability to engage, and ensure appropriate supervisory site interventions, impacting assurance and leading to more workplace risks being taken.

PDO concluded 2020 with a Lost Time Injury Frequency (LTIF) per million manhours worked of 0.17 (0.10 in 2019), while the Total Recordable Case Frequency (TRCF) per million manhours worked fell to 0.56. Sadly, there were four work-related fatal incidents involving contractors. The annual exposure was 203.7 million manhours worked and 323.7 million kilometres driven.

Looking forward, we will work hard to improve our compliance and assurance performance, evidence-based verification and the embedding of learnings from incidents.

On the environmental front, there was a 26% reduction in the number of spills per million tonnes of oil production to

0.49, while our greenhouse gas intensity dropped six per cent to 0.21, with a 0.7 million tonne reduction in carbon dioxide emissions.

There was a 30% fall in the volume of gas flared (14.37 tonnes of gas for every 1,000 tonnes of hydrocarbon produced), and a 4.7% decrease in the overall volume of waste generated, and a 24% drop in non-hazardous waste.

### Production

As the country's largest hydrocarbon producer, PDO complied with directives on total oil production output in line with the pledge by the OPEC+ alliance, which includes Oman as a signatory, in response to record low international oil prices.

PDO average oil production for 2020 was 601,530 barrels per day (bpd), down 2.4% from the 2019 total of 616,380 bpd. Condensate output was 106,680 bpd, our highest ever, while gas production was 6791 million m<sup>3</sup>/d, consistent with export targets and lower (COVID-19 impacted) domestic demand.

The combined total average barrel of oil equivalent production per day (oil, condensate and gas) rose 3.6% to 1.254 million boepd, compared to 1.210 million boepd in 2019.

### Exploration

PDO's strong delivery focus helped complete another successful year with oil and gas bookings made across Block 6 and from various plays from the core Shuaiba to the emerging Karim. A total of 102 million barrels of oil and 0.5 trillion Tcf of non-associated gas were booked as cCR volumes in 2020. The overall unit finding cost was just US\$1.4 per barrel of oil equivalent. The unit technical cost of these discoveries was also highly competitive, with early wells already in production and full field development plans underway.

### Well Engineering

The Well Engineering Directorate delivered 617 wells, achieving a new drilling Non-Productive Time record of 6.7%, compared with the 8.2% in 2019, despite some adverse weather events and COVID-19 challenges.

PDO ended the year by setting a new cost per metre record at US\$1,066 with 68% of our wells being rated in the top quartile, and 32% best-in-class through our relentless pursuit of Continuous Improvement (CI) and reducing the Gap to Potential.

### New Technology

Responding to pressing technical challenges such as water management, energy efficiency, artificial lifting performance, well construction and completion and production measurement, PDO has continued its new technology deployment journey.

In 2020, 10 new technologies were deployed after successful trials, while 12 new trials were initiated as a result of rigorous market analysis and a rapid contracting and procurement process.

PDO has also continued to help forge closer links between industry and academia by nurturing the Ejaad research and

development platform to assist the sector. To date, we have awarded 13 joint projects to different universities which have been prioritised based on their relevance to key technical challenges, such as energy efficiency, water management and bioenergy.

### Lean/Business Efficiency

We strengthened our Lean and Continuous Improvement (CI) programmes across the entire organisation. These provided a solid foundation to help many teams transition seamlessly to virtual operations and maintain performance levels despite the disruption caused by the pandemic.

The Company held 14 Cost Optimisation Reviews (CORs), which are focused, multi-day workshops where PDO, together with the relevant contractor, identified opportunities for efficiency enhancement and waste elimination. These identified near-term savings of US\$16.7 million over a 3-4 year period.

### In-Country Value (ICV)

To boost national employment and economic diversification, we helped deliver more than 2,500 job opportunities in different areas such as training for employment, redeployment, transferability and scholarship opportunities with our contracting community and as part of our own internal recruitment.

We have stayed the course with our commitment to retain more of the wealth of the oil and gas industry in Oman playing a significant role in the industry's ICV Blueprint Strategy since its launch in 2013, leading 43 out of the 53 opportunities.

In 2020, the total cumulative revenue from PDO contracts for Super Local Community Contractors was more than US\$157 million, the Local Community Contractor spend was around US\$182 million and matured LCC spend was around US\$285 million. We also made a US\$306 million direct investment with small and medium enterprises (SMEs).

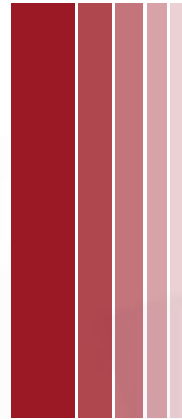
### Staff Development and Recruitment

At the end of 2020, PDO employed 8,943 staff, of which 7,687 were Omanis. The Omanisation rate increased from 84% to a record 86%. There were 1,173 women on staff, including 1,061 Omanis, the highest number in PDO's history. A total of 443 nationals were hired in the year and the total number of Omani graduates was 111.

### Social Investment

Our focus was on four social investment themes: learning and research, community infrastructure development, HSE, and youth and women empowerment.

We committed to 48 new social investment projects, totalling around US\$4.74 million. These include infrastructure development, training and the provision of technology and equipment and will have tangible impacts on the quality of life of thousands of people living in our concession area and beyond. A further US\$1.2 million was distributed in sponsorships, grants and donations to support impactful initiatives by local organisations.



**Occidental of Oman Inc.**  
 أوكسيدنتال عمان انكروپريتد

## Occidental Oman

Occidental of Oman, Inc. is a wholly owned subsidiary of Occidental, an international oil and gas exploration and production company, and one of the largest U.S. oil and gas companies based on equity market capitalization. Occidental has been producing in Oman for over 30 years, where it has steadily increased production and reserves, and is honored to partner with the Government of Oman. Today, Occidental is the largest independent oil producer operating in the country, with major operations in the north, primarily at Safah Field, and in central Oman at Mukhaizna Field. Occidental was recently awarded three new exploration blocks, more than doubling its land position in Oman to 6 million gross acres.

### Health, Safety and Environment (HSE)

Occidental of Oman continues to emphasize safety in the workplace. Occidental's combined Total Recordable Case Frequency (TRCF) in 2020 equaled the lowest reported in the company's history, and was 17% lower than 2019. In 2020, the company saw zero Occidental Oman employee recordable injuries and 7 recordable contractor injuries. Occidental Oman employees and contractors worked more than 34.2 million man-hours in 2020. All other HSE metrics, including Total Injury Rate (TIR), Lost Time Injury Rate (LTIR) and Total Motor Vehicle Incident Rate (TMVIR), were the best ever reported. In 2020, Occidental Oman employees and contractors managed to work 317 days with ZERO harm and 214 consecutive days without a recordable injury.

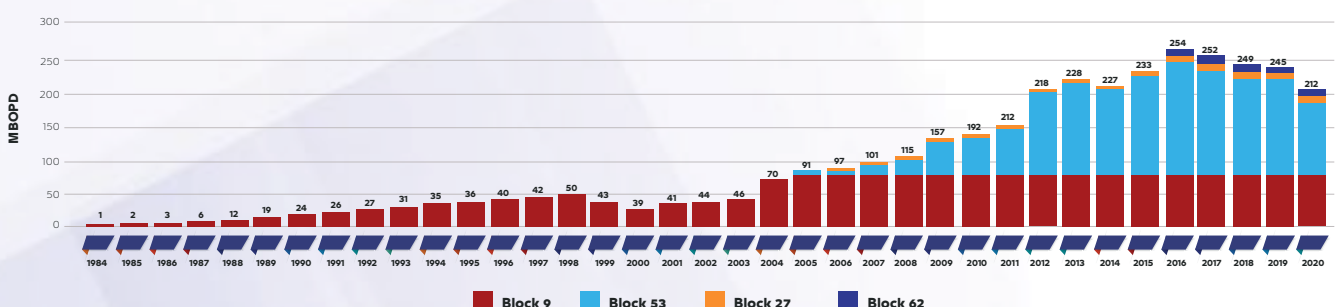
This resulted in a reduction in the number of injuries, including first aid cases, by 51% and a reduction in hand and finger injuries by 41%. In addition, a total of 33 high level risks were mitigated during 2020. Occidental continued to emphasize several HSE programs despite the pandemic special situation, including, "HandSafe+", "DROPs Prevention", Hazard Recognition", "HSE Data Analytics", and "Health Surveillance" for employees and contractors.

Finally, Occidental developed and implemented a COVID-19 Business Continuity Plan across the organization and cascaded the plan to all contractors in an effort to help protect those working for Occidental and minimize any disruptions in operations. Occidental achieved a total reduction of 13% in Green House Gases (GHG) emissions when compared to 2018 (reference year). Finally, Occidental obtained ISO 50001 Energy Management System (EnMS) certification marking an international acknowledgment for the robust, structured and comprehensive approach followed by Occidental to improve energy efficiency which aimed to reduce operation costs, save natural energy resources and eventually contribute to reduce GHG emissions.

### Key Achievements in 2020

Occidental Oman managed to produce 212 MBOED in 2020, despite experiencing OPEC constraints and fluctuating oil price environment, which cut the production by almost 14MBOED.

## Production Growth



## Human Resources

Occidental Oman has developed and implemented a long-term sustainable hiring strategy for Omanis. This strategy has contributed to generating more than 3,400 employment opportunities, and a resulted 93 percent Omanization of Occidental Oman's workforce as of 2020:

- Approximately 45 percent of the Omani hiring were job seekers. More than 1,541 job seekers were hired, including fresh graduate degree holders and diploma holders.
- Total of 401 locals from concession areas that we operate in were hired and trained to become competent operators and technicians.
- In 2020, Occidental Oman hired around 46 job seekers, and efforts are ongoing to define more opportunities to support its long-term Omanization plans.

Occidental Oman's Talent Management Strategy has resulted in the development of Omani leaders who have stepped into varying leadership roles. As of 2020, Occidental Oman's overall leadership roles were at 90 percent Omanization.

## Sustainable Development and Social Responsibility Programs

Occidental Oman has sponsored a variety of projects in 2020, focusing on sustainable, long-term impact. Some of the highlights include, but are not limited to:

- Exclusively sponsoring the Oxy Program for Entrepreneurial Development in Frontier Technology (.NXT), to bridge the gap between the higher education programs and future economy skills.
- Sponsoring the construction of an Autism Center in Ibri, Al Dhahirah governorate.
- MEM Joint Projects Initiative – sponsoring and overseeing the construction of the Outward Bond Oman Training Center in Jabil Al Khadar.
- Sponsoring the installation of smart safety systems in government school buses across Muscat.
- Funding purchase of medical equipment in Ibri Hospital for the treatment of COVID-19 patients.
- Funding purchase of flu vaccine shots for essential workers, elderly, people with chronic illness.
- Honoring of high performing school students in Al Wusta Governorate, Wilayat Adam, Hamra Al Duru and Wilayat Bahla, as well as honoring the top 100 General Education Diploma graduates.
- Sponsored the E-Preparation Platform for Teachers in 2020, in response to COVID-19 pandemic.
- Provided tablets for students from low income families in Al Wusta and Hamra Al Duru, in order

for them to continue online learning during the pandemic.

- Funding the purchase of 101 Non-Contact Infrared Thermal Scanner Thermometer for all schools in Al Wusta governorate, which is aimed to control the spread of COVID-19.
- Funded the English Training program providing English language training to Al Wusta and Hamra Al Duru students, organized by The British Council, under the supervision of MOE.

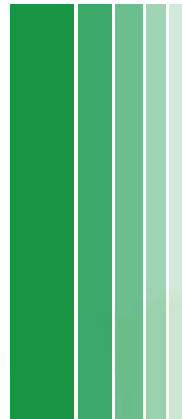
## In-Country Value (ICV)

The ICV contribution of Oxy's contractors reached 49% by Q3, 2020 compared to 47% last year in the same period.

In support of In-Country Value (ICV) initiatives, Occidental Oman has established a development program for Omani Small and Medium Enterprises (SMEs) in 2013. As of end of Q4 2020, the headcount of the participated SMEs increased to 325 and achieved a growth up to 50%. The average Omanization within the participated SMEs reached in the same quarter to 77% with total of 225 Omanis headcount and three SMEs have already achieved 100% Omanization. Overall, participants achieved up to 215% total increase in contract value reaching a comprehensive total increase of USD 151 Million. In addition, nine (9) ISO Certifications and one (1) API Accreditation have been received by the participants SMEs, 74 of participants' personnel have been enrolled in soft skill training, and 38 of participants' personal have been enrolled in technical training.

In addition, Occidental Oman has initiated and supported a number of ICV initiatives to improve the capacity & capability of Omani contractors, and ring fencing of certain services to Omani Companies, which has resulted in the creation of new employment opportunities, and enhancement of Omani SME and capabilities.

- Identified one manufacturing opportunity for supply of Flexible Flow Line Pipes RTP and Fittings.
- Awarded two ICV opportunities for supplying Dolomite Lime.
- Sponsored a new ICV opportunity for manufacturing of Casing Accessories.
- Awarded Ring-Fencing initiatives for supplying Caustic Soda; for High Temperature Logging; for Fasteners Studs & bolts; and for Premium Connection Machine Shop.
- Awarded VDP Scope Initiatives for Shaker Screen Fluid Vacuum System; for Provision of Refurbishment of Screws & Liners; for LAMIS Metering Uncertainty Calculation Software; for Expediting Management System (EMS); and for LAMFLOW Technology.



الشركة العمانية للغاز الطبيعي المسال ش.م.م.  
Oman LNG L.L.C.

## Oman LNG

Oman Liquefied Natural Gas LLC (Oman LNG) is a joint venture established by a Royal Decree in 1994. It operates under the laws of the Sultanate of Oman and engages in the business of selling liquefied natural gas (LNG) and its by-products as well as natural gas liquids (NGLs).

The company undertakes project operations and related activities essential to liquefy, store, transport and market Oman's natural gas and deliver LNG to customers aligned with the Government's objective of diversifying the economy.

Oman LNG operates three liquefaction trains; two owned by Oman LNG LLC and one by Qalhat LNG SAOC, with a capacity of 10.4 million tonnes per annum (mtpa) at its plant in Qalhat in South Sharqiya Governorate.

## Health, Safety, Environment (HSE)

Since its inception, Oman LNG emphasises safety as the most important consideration in all its operations and business-related activities. It is a key element for each and every work executed on behalf of the company.

Despite the challenges of 2020 and the outbreak of the Coronavirus (COVID-19) pandemic worldwide, Oman LNG completed the year with remarkable achievements in HSE among many other business areas.

A clear evidence of the company's ever-vigilant focus on safety is its contingency plans and response to COVID-19. Not only does the company hold daily meetings with its COVID-19 working group, but it continues to observe the rapid changes of the pandemic by reducing hazards and risks to its personnel and their families.

The number of in-house staff has been reduced as other employees work from home. Equally, the effectiveness of COVID-19 mitigation activities is

reviewed and verified to ensure they continue to be in place and effective. This resulted in receiving the "Best COVID-19 Solution for Community Care Award" from the Middle East CSR Leadership Award 2020.

Oman LNG also implemented the Behaviour-Based Safety Programme to observe, engage and enthusiastically influence and nurture its HSE culture. This will develop and sustain its top-quartile HSE performance even further as it focuses on continuous improvement of the safety culture in the company.

## Key Achievements

In early 2020, Oman LNG hosted the International Gas Research Conference (IGRC) 2020 in Muscat for the first time in the Middle East. Experts from over 32 countries participated in the conference, making it a fruitful platform of knowledge exchange and experience sharing in the scope of innovation and technology.

The company is proud to have ended 2020 by reaching a production of 10.2 million tonnes of LNG. In line with this, the company delivered 155 LNG cargoes to customers globally despite the challenges due to the COVID-19 pandemic.

## In-Country Value

In-Country Value is one of the company's major strategies to raise the profile of the Sultanate's economic status. This takes place by utilising local resources and expertise, thus increasing the total amounts of funds spent within Oman.

Despite the challenges of 2020, Oman LNG job creation continued to prosper with a total of 69 job seekers selected through the Eidad and Internship programmes. Oman LNG continued to play its vital role in Omanisation, as 31 Omanis have been deployed in permanent roles after successfully completing their development plans.

## Corporate Social Responsibility

Corporate Social Responsibility is an integral part of Oman LNG and its Development Foundation. It is a mean to add sustainable, long-term value to Oman by directly addressing the various needs of the people, local communities and development sectors. As a result of its contributory efforts, the Foundation was recently honoured with the "Best CSR Impact Initiative Award» for its commitment towards preserving the environment and promoting tourism through supporting the Turtle Reserve in Ras Al Jinz. This accolade was presented at the Middle East CSR Leadership Awards 2020.

The company allocates 1.5% of its Net Income After Tax (NAIT) to CSR, partnering with both the public and private sectors to contribute to the sustainable development of Oman and its people. In 2020, the sphere of the Social Investment Programmes under Oman LNG continued to grow despite the pandemic and thrived in magnitude, as well as in purpose.

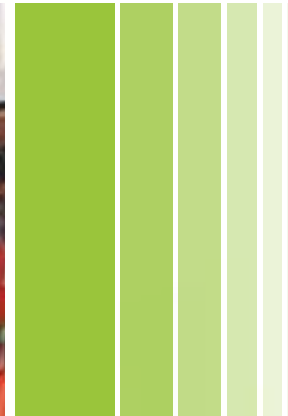
### Some of the projects to highlight include:

- Inauguration of the Isolation Ward at Sur Hospital, which comes at a critical time with COVID-19 surging throughout the world.
- Financing the provision of computers for social security students in collaboration with Al Rahma Association and the Ministry of Social Development.
- Funding research programmes to empower people with disabilities, in partnership with Sultan Qaboos University.
- Financing the provision of medical equipment to the Maternity and Pediatric Department and the Neonatal Intensive Care Unit at Jaalan Bani Bu Ali Hospital.
- Equipping the National Standardised Examination Centre with modern equipment, to allow

examinations to take place locally and enhance the performance of medical staff.

- Purchasing outdoor equipment designed to suit children with disabilities for 19 public parks across 7 governorates.
- Distribution of marine safety bags to 340 fishermen in South Sharqiya Governorate.
- Funding the food baskets and necessary medical supplies initiative in collaboration with the Relief and Shelter Sector to the residents of the isolated area in Jaalan Bani Bu Ali.
- Financing the development of adequate livestock shelters in Sur and a loading facility for fishermen in Ras Al Hadd in collaboration with the Ministry of Agriculture.
- Financing the construction of an endurance village for horse riding in Barka in collaboration with Oman Equestrian Federation.





## bp and Oman – a strategic partnership

2020 was an important year in bp's strategic partnership with Oman as we brought Ghazeer - phase 2 of the Block 61 development – online safely and ahead of schedule, delivering critical infrastructure for the Sultanate.

The gas from Ghazeer will contribute towards Oman's 2040 vision in terms of providing additional energy to local industries as well as diversifying the economy.

Block 61 exemplifies what a strong and resilient hydrocarbons business looks like – a core part of bp's strategy.

### 2020 highlights

- Third year of production from Khazzan with over 99% of plant reliability, one of the best in bp's global operations.
- Ghazeer brought online safely, ahead of schedule and with capital discipline
- 96 wells up and running.
- \$610m spent with Omani registered companies
- 85% Omanisation achieved
- Fifth year of our successful social investment programme

### Keeping our people safe

We aim to foster a genuine culture of care for our workforce, whether it's our own employees or those indirectly working for us through contractors. Our safety approach adheres to internationally recognised industry standards, but also draws on the decades of experience across bp's wider global operations.

Safety training and education is central to delivering upon this commitment in Oman, along with continuous tracking of safety performance and new technologies.

### In 2020 we:

- worked 16 million hours, with zero major incidents and only one day away from work case "LTI".
- drove 23 million kilometres at Block 61 without an accident.
- reduced governmental reportable cases by 30% compared to 2019.
- reused 44% more treated water in road and well pad constructions.
- achieved a massive milestone in the management of hazardous waste with 7,777 tonnes of oil-based mud cuttings treated using a new thermal treatment process.

### Protecting the communities and environments in which we operate.

A key element of our strategy is a framework to 'reduce, improve and create'. We are committed to reducing greenhouse gas emissions; improving our products to help customers and consumers lower their emissions and creating low carbon businesses. This enables us to monitor changing trends, consumer preferences and legislation, and provides us with optionality to adjust our portfolio and adapt to the future.



### In 2020 we:

- Reduced our total emissions by 32% compared 2019. This was achieved due to high operational efficiency and implementation of different sustainable emissions reduction projects.

### Continuing our commitment to in-country value

We are proud to support the sustainable development of Omani society. We do this through three main strategies: supporting local business growth and overall economic productivity; encouraging the development of Omani skills and capability; and generating employment and training opportunities.

### In 2020 we:

- Spent over \$610m with Omani registered companies.
- Celebrated Abraj's first well stimulation in Block 61.
- Reached over 85% Omanisation of bp's workforce in the Sultanate. This is set to grow to 90% by 2025.
- Recruited over 60 Omani graduates through the bp Challenge programme since it launched in Oman in 2010. Continued to develop Omani technicians as part of our Technician Development Programme. To date, more than 65 technicians have been trained in this programme with some also having had the opportunity to work with bp's partner OQ and Oman LNG, thanks to an agreement between the three companies.
- Supported 18 Omanis to work in some of bp's worldwide operations, helping boost their capabilities, including those who hold senior positions.

### Delivering the fifth year of our successful social investment programme

bp long-standing social investment programme is a unique model that works towards serving and empowering local Omani capabilities in driving Oman towards a self-sufficient and progressive future.

Over 94,000 people have benefitted directly through 106 initiatives since the launch of the programme in 2014. Initiatives are delivered under three main themes: enterprise development, education and energy sustainability.

### Our social investment programme in 2020:

- Shortlisted for ADIPEC 2020 awards
- Won Riyada Award for the 'best development initiative'
- Recognized by Al Roya Corporate Social Responsibility Forum





## For Safety of Our People and Community: Quick & Effective COVID-19 Response

### Key Highlights:

1. Zero Motor Vehicle Incident (MVI) for Two Years, and zero Lost Time Injuries (LTIs) and Tier-1 PSM incident in 2020.
2. OPAL Award for Best Practice in Maximizing Field Recovery in the category of Research & Development
3. Discovery of Basirah Field
4. 2nd Place Winner at the Environmental Competition in Al Dhahirah Governorate on the Occasion of Oman Environment Day
5. 96% Omanization Rate at All Levels
6. Successful renewal of three ISO certificates for 3 consecutive years

### Quality, Health, Safety, Security & Environment (QHSSE)

Daleel Responds to COVID-19: Business During the Pandemic

From the beginning, Daleel Petroleum has run its operations with consideration to Safety of Workforce as the most priority as it continues contribution to the economy. In line with the directives of the Supreme Committee entrusted with undertaking measures to tackle developments resulting from Coronavirus (COVID-19) pandemic, the company has implemented preventive measures that have contributed significantly to safety in operations for both Daleel employees as well as its business partners through:

1. Readiness of Emergency Response Team
2. Working Remotely
3. Series of Safety Preventive Measures (Field/Muscat).

This resulted in Zero Motor Vehicle Incident (MVI) among Daleel employees and its business partners (contractors and/or sub-contractors (during 2019 & 2020.

### Exploration & Development

#### 1-DEVELOPMENT OF ULTRA-THIN RESERVOIRS

Daleel Petroleum is a pioneer in drilling and developing ultra-thin carbonate reservoir units. Geo-steering team utilizes integrated subsurface data and logging while drilling readings to act proactively and yield optimum well placement. This resulted in unlocking hydrocarbon volume in Block-5, which increased additional oil reserves to Daleel's portfolio.

#### 2-ENHANCED OIL RECOVERY (EOR)

Since 2007, Daleel Petroleum has implemented extensive laboratory experiments and several field-testing trials of chemical Enhanced Oil Recovery (EOR) to extract crude oil from our fields. Our chemical (EOR) technique is expected to enable us to increase oil recovery factor by about 10%. EOR is considered one of the key factors for oil production sustainability in Daleel Petroleum.



### 3- DEVELOPMENT OF HIGH-RATE MATRIX ACIDIZATION METHOD

Unlocking hydrocarbons potential from tight reservoir has been a global challenge where conventional matrix stimulation is not enough. Daleel Petroleum has always strived for innovation, which led us to develop and adopt cost effective large volume high pressure acidization method successfully. This method has proven to have encouraging outcomes with very good improvement in production and injection performance at sustainable rates and without the need for the expensive frac jobs.

#### **Omanization & Empowerment**

##### Omanization

Daleel employed Omanis in operational and support departments during 2020. Hence, Daleel managed to achieve and maintain a 96% Omanization rate across the organization.

#### **Culture & Community**

##### Corporate Social Responsibilities (CSR)

##### 2020 Key Projects:

- 1- Construction of a New Kidney Unit in Ibri Hospital.
- 2- Supporting Geological Society of Oman (GSO) Activities.
- 3- Construction of a Public Walkway in Ibri.

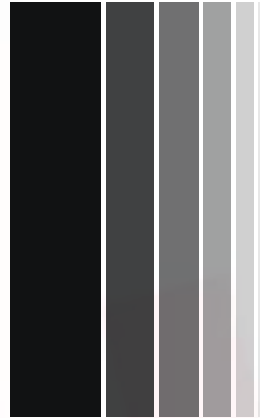
#### **In-Country Value (ICV)**

Daleel Petroleum is committed to the development of the Omani economy through an optimised In-Country Value (ICV) programme.

The "Istimrar Programme" objective was to develop entrepreneurs' capabilities to overcome economic challenges associated with COVID-19. A total of 22 entrepreneurs participated in the programme with passion and energy to tackle the challenges.

The company and Business Gate organized a visual session to discuss the impact of COVID-19 on the business and ICV.

Local Business Development Road Map: In order to further extend support to local businesses, SMEs, Local Community Contractors (LCCs) and Super LCCs hit by the pandemic, Business Development Road Map has been activated to support them.



## CC Energy Development S.A.L.

(CCED) is an independent value-driven company delivering long-term growth to Oman's hydrocarbon sector. Adopting a 'Think Global and Act Local' mindset, we have grown our operations organically over the last 11 years producing more than 100 million barrels of oil to date. Champions of knowledge transfer for a sustainable hydrocarbon value chain, CCED and its partners continue to invest more than USD 250 million annually in exploration, appraisal and production activities to sustain and grow output. Thanks to our successful exploration strategy our current production sits at around 40,000 bbl/day, with plans underway to increase production.

With a workforce of over 90% Omani CCED is building a cadre of capable professional staff, arming them with the industry know-how to lead the sector in the future. We are a dynamic, ethical and responsible organisation that believes in giving back to the communities we operate in by enabling their development and acting as catalysts for positive change.

### Our Vision

To be a sustainable and long-term value generating business for CCED & Oman with:

- A culture that recognises people as its most valuable asset, while putting Health Safety and Environment (HSE) at the forefront of decision making and driving opportunities to increase the value of the business
- An organizational structure and business processes that ensure value is created from each barrel produced
- A long-term value generating growth agenda
- A cost-efficient operational model enabled by technology

### Our Assets & Milestones

CCED's operating footprint is in Blocks 3 & 4, one of the largest concession areas in the Sultanate of Oman.

### CCED Assets in Oman

Onshore Blocks 3 & 4

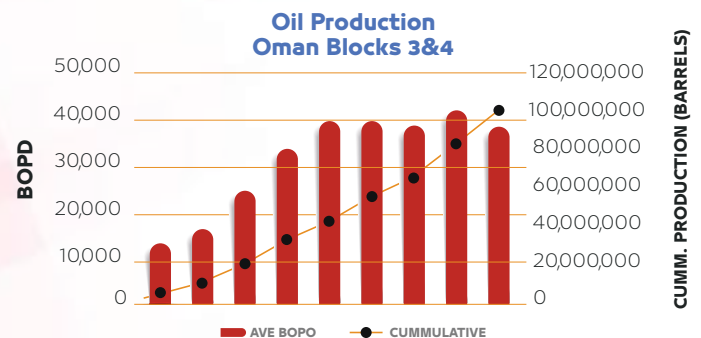
CCED	Operator
Tethys Oil	Partner
Mitsui E&P Middle East B.V	Partner

### CCED Key Milestones in Oman

- Milestone of 100 million Barrels Produced
- Total of 349 wells drilled by end of 2020
- 79% of the total commitment purchases from local suppliers
- Opened a lab for on-site testing of Covid19 to ensure the health of our employees
- Over USD 250 million investment planned annually (2020 - 2025)

### Oil Production

Oman Blocks 3&4 (2012 - 2020)



Drilling:

- Rig count in 2020: 3 Rigs

Seismic:

- 2020 CCED completed 1,650 km<sup>2</sup> of 3D

### Building Capability

CCED believes its successful track-record is driven by the capacities and potential of its people. We are committed to developing Omani talent at all levels of the organisation. The total workforce is around 670 people and currently over 90% are Omani.

CCED provides a challenging and stimulating work environment for young graduates with opportunities across various technical functions such as Petroleum

Engineering, Drilling Engineering, Geology, Project Management, Engineering, Production Operations and Maintenance.

Well-developed people practices make working at CCED both enjoyable and rewarding, providing aspiring Omani talent with the opportunity to learn and grow their careers.

### Committed to grow the Omani Economy

Playing its part in Oman's economic development, CCED is a sustainable contributor to the Sultanate's long-term hydrocarbon vision. We believe that it is our responsibility to invest in the communities we work with and develop a business that can bring value to Oman.

**Our In-Country Value (ICV) programme is based on four core pillars:**

- Omanisation through employment, education, training and development.
- Supporting local community contractors.
- Assisting in developing and promoting newly established Omani companies and ensuring knowledge transfer and training are key collaboration areas.
- Supporting the development of the Super LCCs and recently signed our first contract with Al Sawari.

### Health, Safety & Environment (HSE)

CCED is a responsible operator with a non-compromising attitude towards HSE. Strong and visible leadership is delivered through the following commitments:

#### TRUST

We will always behave in a way that builds trust amongst employees and contractors, that we put safety first and individuals clearly feel that the primary expectation from us is to perform all operations and daily duties safely.

#### COMMITMENT

We will always promote CCED's Life Saving Rules and behave in a way that builds confidence in individuals that, when followed, these rules will provide a safe working environment.

#### EMPOWERMENT

We will always behave in a way that ensures individuals feel empowered to stop any operation or activity, without repercussion, if they feel that it may not be safe or they do not understand what they should be doing.

#### ZERO TOLERANCE

We shall at all times show zero tolerance of unsafe behaviours and shall demonstrate a culture of intervention, stopping incorrect/unsafe behaviour and acknowledging good behaviour.

We believe these commitments will deliver our goal of an environment where all employees and contractors, both Field and Office based, share the "value" that all our operations and daily duties can and will be delivered with "zero injuries".

Below are some of CCED's HSE initiatives delivered in 2020;

### 1- Safety Culture & Life Saving Rules

As part of creating a common safety culture; CCED introduced its New Life Saving Rules, in-line with international best practices. Along with this, CCED launched an online training platform for its employees and contractors which included LSR training and HSE induction.

### 2- Occupational Health

As part of its efforts to protect employees from being exposed to COVID-19 and minimize the quarantine period required from employees, CCED established its very own COVID-19 lab and screening process for all employees and contractors entering the field.

### 3- Contractors HSE Performance reviews

Building its relationship with contractors, CCED conducts monthly HSE performance reviews to ensure continuous collaboration between teams on HSE performance matters.

### Major Projects

CCED is identifying new exploration opportunities through existing and new seismic acquisition, in depth technical studies and leading edge evaluation techniques. These opportunities are intended to test new ideas in terms of the stratigraphic/ structural trap concepts/ new plays as well as existing field extensions/ trends.

#### 1. Exploration and Appraisal Discoveries

Anan-1 (Exploration): Spudded in 25-11-2020, Completion Date: 31-12-2020 (oil discovery).

#### 2. 3D seismic acquisition

- Block3 North 3D EXT (2,616 sq.km)

#### .3 3D seismic Processing

- Block3 North 3D (1,730 sq.km)

- Block3 North 3D EXT (2,616 sq.km)

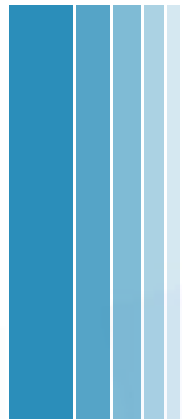
#### 4. Seismic Re-Processing

- Advance structural 3D depth imaging (241 sq.km)
- Seismic Merge

### Well Drilling Program

Wells activities were reduced in 2020 due to the low oil price market environment, however with the current healthier business environment, wells activities will quickly increase in line with the recently approved business plan for 3 rigs.

In 2020, 25 wells were delivered including the Anan-1 discovery well. Sustainable performance improvements have been seen in most of well type portfolio across Farha, Shahad, Erfan, Samha and Ulfa. Several improvement projects were implemented which contributed to reducing well duration and cost, thus reducing the gap to potential. Further efforts are ongoing to prevent downtime events, improve drilling efficiency and sustain the improved drilling performance"



### Tethys Oil Company

The Sultanate of Oman has been the core area for Swedish oil company Tethys Oil since 2006. As an active partner, Tethys Oil has helped secure the success of Blocks 3&4. In the last three years, the Company’s operations in Oman have expanded when the exploration Blocks 49 and 58 was awarded to Tethys Oil in 2017 and 2020 respectively. In addition, Tethys oil also farmed into Block 56 in 2019.

Tethys Oil’s aim is to explore and produce oil and gas in an environmentally, socially and economically, responsible way to achieve long-term sustainable development in the Omani oil and gas industry.

### Concessions

Tethys Oil AB, through its wholly owned subsidiary Tethys Oil Montasar Ltd., is the operator of Block 49 with 100 percent working interest. Tethys Oil AB is also, through its wholly owned subsidiary Tethys Oil Qatbeet Ltd., operator of Block 58 with 100 per cent working interest. In addition, Tethys Oil is a partner holding a 30 per cent interest in Blocks 3&4 and 20 per cent in Block 56.

### Organisation

All Tethys Oil’s technical work is executed in the Sultanate of Oman by an exploration, development and production focused organisation with a team of highly trained Omani engineers and subsurface specialists. In recruiting staff, preference has always been given to Omani nationals, and currently the Omanisation rate amounts to 80 per cent.

### Health, Safety and Environment

The genuine care for Health, Safety and Environment is a core value for Tethys Oil, and shall be transparent through all plans and actions. It is Tethys Oil’s objective to provide a healthy and safe working environment for

employees, contract personnel and members of the general public who might be affected by its activities.

Figure below shows incident report during 2020.

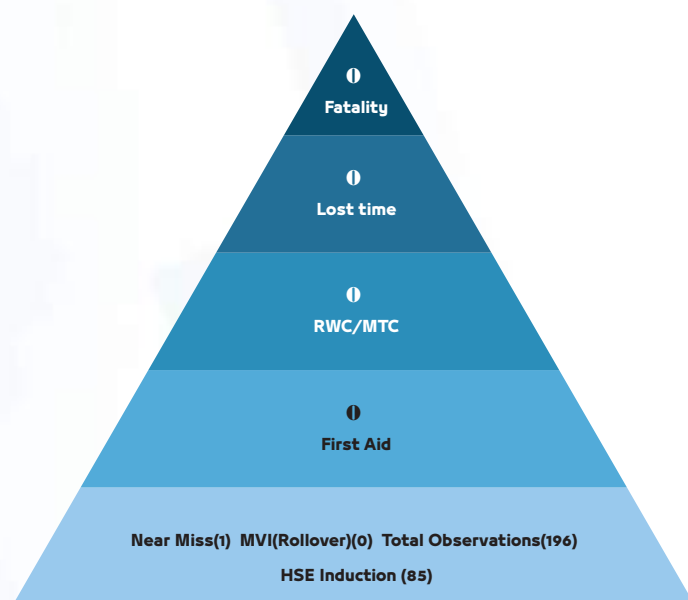


Figure: HSE statistics from Jan 1, 2020 to 31 Dec 2020

Tethys Oil and the Company’s contractors have during all operations since field work started on Block 49 achieved 784 days without any Lost Time Incidents (LTI). The work programme has included a total of 139,608 Man-Hours and 426,340 km has been driven by different vehicles.

### Operational Summary

#### Block 49

The work programme on Block 49 was in 2020 focused on drilling preparations of the Thameen (“Precious”) prospect in the north eastern part of the block. Construction at the drill site started during the autumn 2020, including construction of roads, drill pad, and camp. Strict health and safety measures

were implemented, in order to ensure smooth and safe operations under the Covid-19 circumstances. The Thameen-1 exploration well spudded on 31 December 2020. The well is planned to be drilled to a depth of about 4,000 meters. Primary target is the Late Ordovician Hasirah Sandstone layer. A secondary target is the Mid-Ordovician Saih Nihayda Sandstone. In addition, the well will also investigate the shallower Gharif Sandstone as well as collect data to further enable an assessment of the hydrocarbon potential of the block, both conventional and unconventional.

Tethys Oil's previous work during the first exploration phase of the EPSA includes geological studies and studies of legacy seismic data, including reprocessing 1,464 km of vintage 2D seismic data, and a seismic campaign where 253 km<sup>2</sup> of 3D and 299 km of 2D seismic data were acquired in the north-eastern part of the license area. Interpretation of the new 2D and the 3D seismic data resulted in the maturation of The Thameen prospect.

The main target of the work programme on Block 49 in 2021 is to complete drilling, testing and evaluation of Thameen-1 exploration well.

### Block 58

The Government of the Sultanate of Oman and Tethys Oil entered in July 2020 into an Exploration and Production Sharing Agreement for Block 58 onshore Oman. Since July 2020, Tethys Oil has reviewed legacy seismic 3D data and prepared the work programme for 2021.

The work programme on Block 58 will in 2021 be focused on reprocessing of legacy 3D seismic data and conducting a new 3D seismic acquisition.

### Corporate Social Responsibility

Tethys Oil's activities strive to create shared prosperity between stakeholders. It seeks to respect and gain the respect of the people and governments of countries in which it operates. Good relations with host countries are prerequisites to Tethys Oil's business. Wherever operations are conducted, the sovereignty of the state is respected and the rule of law is observed and promoted.

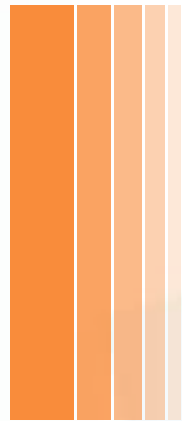
in 2020 the following initiatives has taken place

- Honouring 240 students from four Wilaytes in Dhofar region for their outstanding academic achievements and performance in school competition events
- Sponsored a multimedia design competition for students during Arab and International Water Days which was planned to be held in Salalah in March

2020 but postponed until 2021 due to Covid -19 situation

- Assisted Marsudad village in Wilate of Maqshin build a playground for children with appropriate HSE requirements
- To support the Ministry of Education in their efforts ensure the safety of students, teachers and staff during the academic year of 2020 in line with the measures adopted to limit and control the impact of Covid-19. Students from grades 5 to 12 in Wilgate Maqshin were provided with 97 Tablets to facilitate distance learning
- Sponsored several competitions at Dhofar University under the themes Volunteerism During Covid-19 Pandemic, Arabic Language and Computer Coding
- Sponsored several civil works at the village of Marsudad related to safety at RO-tank supplying the village with water
- Sponsored a follow-up on an archaeological assessment in Block 49 to explore the lithic typological and technological characteristics of the surface assemblages, as well as to assess the archaeological sensitivity of the landscape
- In addition, Tethys Oil along with joint venture partners, CC Energy Development S.A.L. and Mitsui E&P Middle East B.V. in Blocks 3&4, is pursuing several CSR initiatives.





### About OQ:

OQ is a global integrated energy company with roots in Oman – operating in 17 countries around the world and covering the entire value chain from exploration and production to marketing and distribution of end-user products. Our fuels and chemicals are sold in over 60 countries worldwide, making us a key player in the energy sector.

Integrated Structure and Business Model:

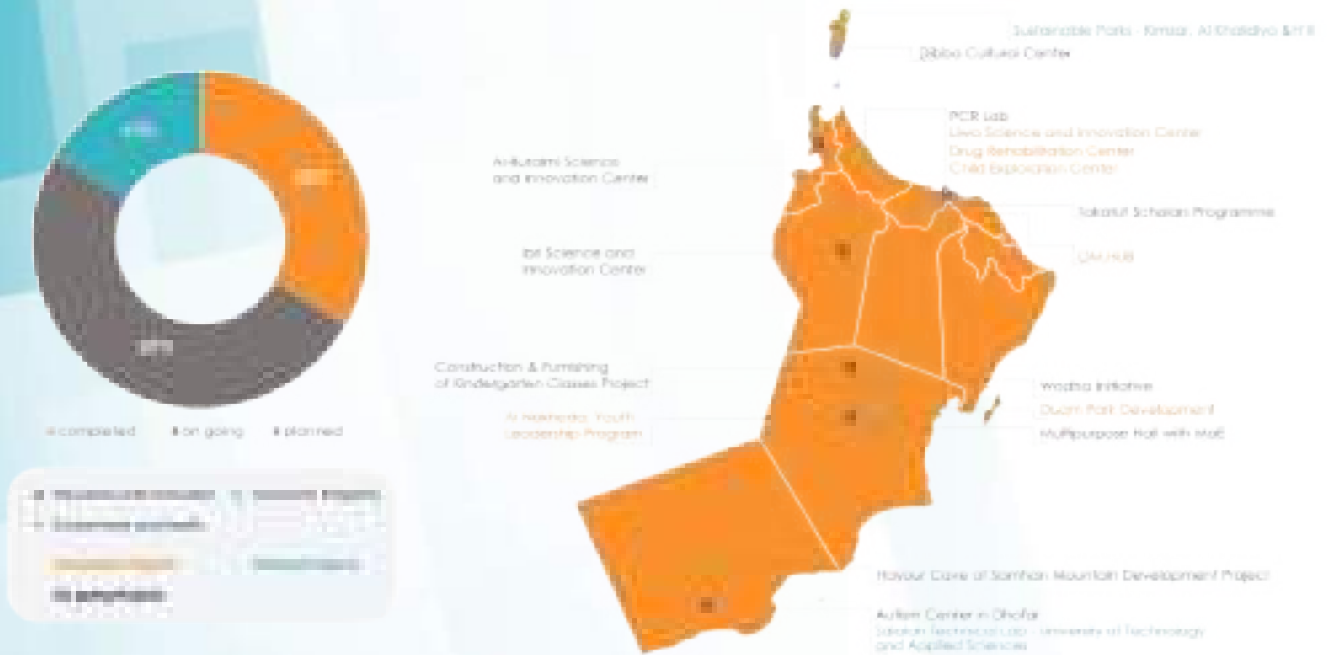


### Corporate Social Investment: (CSI):

OQ's Corporate Social Investment (CSI) programmes and initiatives that were implemented in 2020 together with the external affairs management contributions to strategic partnership with Public, Private and NGOs sectors. Projects are implemented in Oman with a purpose to serve the whole nation, in-line with the national agenda of Oman's "Vision 2040", and ultimately creating a sustainable impact to people and communities. OQ aims to make continuous and sustainable impact on communities in which we operate, taking into considerations the company's aspiration and strategic priorities, UN SDGs 2030 and community needs and expectations. The following key focus areas were concluded to shape the new CSI framework with three focus areas:

- Innovation and Education
- Environment and Health
- Economic Prosperity





### In Country Value (ICV):

OQ is committed to maximizing In Country Value (ICV) by retaining an increased share of its total spends in the country. The ICV initiatives focus on developing national manpower mainly in skills and professional categories. In addition, it focusses on boosting SMEs, local services and the manufacturing sector in cooperation with contractors, Ministry of Energy and Mineral (MEM) and other related authorities within the country.

In 2020, value spent on local goods, services and SMEs in the country was USD 713.8 Mn out of the total procurement spent of USD 1.001 across OQ Core Assets including projects, which means that 70% of OQ's spend was on goods and services sourced locally. The value retained (ICV index) was around 28% (USD 281.8 Mn), as an ICV contribution from local goods and services, together with the spend on SMEs which was (USD 89.6 Mn) for various goods and services. Moreover, for major projects, OQ contributed to local goods, services and SMEs through contractors, as well as by providing scholarship and training opportunities to Omani nationals. With the objective of optimizing ICV opportunities, OQ undertook the following activities:

- Developed ICV Monitoring and Reporting System to consolidate all OQ
- ICV reporting, aligned with the system approved by Ministry of Energy and Mineral (MEM).
- OQ was qualified as one of the top three companies in Oman providing best support to SMEs in RYADA award 2020.
- Floated tender targeting local manufacturers of FFS packaging material.
- Awarded contracts with minimum requirements in recruitments and training of Omani fresh graduates, besides subcontracts to locally source goods, services and SMEs and to fund Research and Development programs.