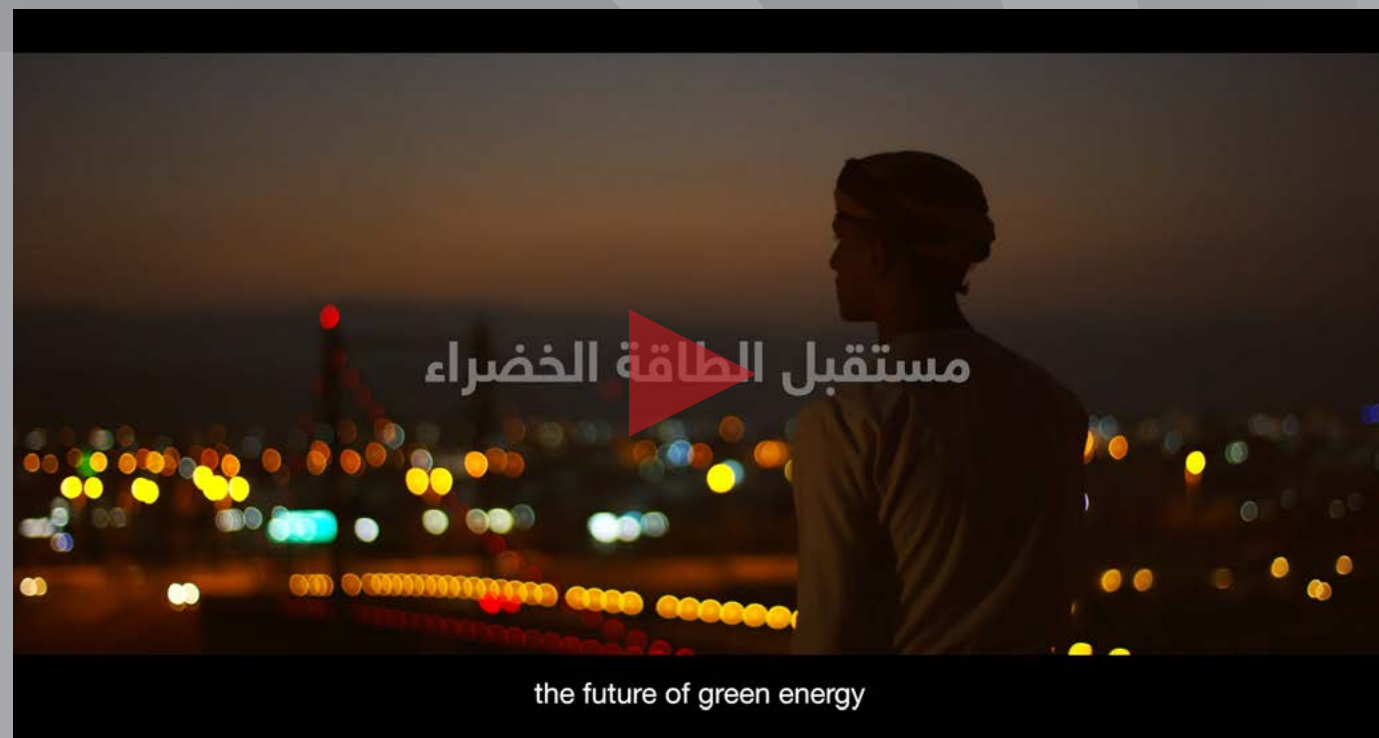




وزارة الطاقة والمعادن
Ministry of Energy and Minerals



Annual Report 2022



Committed to Sustainable
Development



“We stand today with firm invincible will on the threshold of a vital stage of development and nation building. It is a stage which you all have participated in drawing out its prospects in Oman 2040 Future Vision, and contributed to devising its economic, social and cultural goals, in a manner that embodies a clear-cut vision, great expectation towards a more prosperous future.”

**Speech of His Majesty Sultan Haitham bin Tariq,
23 February 2020**





Salim bin Nasser Al-Aufi,

Minister of Energy & Minerals.

We, seek in the Ministry of Energy and Minerals to make the best use of natural resources comprising oil, gas, minerals and renewable energy by supporting research and exploration to enhance the reserves, introduction of new technologies that contribute in the optimal exploitation of those resources, supporting convergent manufacturing and the active contribution in fulfilling the needs of the local and international market on energy and minerals.

The year 2022 has witnessed a great improvement in terms of increasing production of oil and gas and their reserves as well as improving the ICV programs, in comparison of the previous year. Additionally, the Ministry worked on drawing an ambitious strategy to ensure the development of the green hydrogen economy, in order to pave the way for companies to invest in that field, whereas the Sultanate strives to become one of the world pioneers in the production of green hydrogen.

Oil production in the Sultanate of Oman rose in 2022, with an daily average of 1.064 million barrels per day, compared to 971 thousand barrels in 2021, with an increase of 9.6%. Furthermore, the Sultanate has maintained the same level of oil production in line with the production reduction agreement concluded with Member states of the Organization of the Petroleum Exporting Countries (OPEC) and other countries outside the organization, which aim to achieving a balance between global supply and demand for oil.

The total production of natural gas plus imports amounted to (52,061.87) million cubic meters, with an average daily production of (142.6) million cubic meters.

The average price of Omani crude oil during the year 2022 reached about (95.36) USD per barrel, registering an increase of 48% comparing to previous year 2021. while the price of a barrel of Omani crude oil ranged between (73.14) USD per barrel as a minimum in February , And (112.93) USD per barrel as a maximum in August of the same year.

Moreover, the total expected reserves of crude oil and condensate have reached (4,905) million barrels by the end of 2022, up by 1% compared to the previous year,

while the expected natural gas reserves in 2022 amounted to (24) trillion cubic feet, up by 7% from last year.

The total production of electricity has reached in 2022 41.8 TWh with a net production of 40.4 TWh, with an increase of 2% compared to last year.

Moreover, the production of electricity further surged by 138% in comparison to 2021 due to continuing to operate Ibri 2 station owned by Shams Al Dhahira Generating Company.

Furthermore, the Ministry of Energy & Minerals, along with its partners, have made strenuous efforts in regulating the Hydrogen sector in order to reach the highest levels of its aspired outcomes, whereas major steps have been taken by the Ministry to accelerate the procedures for regulating that sector, formulate the legal frameworks and policies needed for its development as well as study its production and storage sites, to attract and localize investments. Also, the Ministry announced the opportunities and incentives aimed at investing in green Hydrogen sector.

In keeping with this momentum in the renewable energy and hydrogen sector, the Ministry of Energy & Minerals organized the Green Hydrogen Summit in 2022 and participated in COP 27 in the Arab Republic of Egypt in order to strengthen the role of the Sultanate of Oman among the countries of the world in energy transformation plans towards reducing carbon emissions. and to strike a balance between sustainable development and reducing the implications of climate change, which came out of the Carbon Management Laboratory supervised by the Ministry of Energy & Minerals in line with the steps taken by virtue of the high directives to promote Carbon Neutrality in 2050.

In the minerals sector, the total production of mineral ores in 2022 was about 63.6 million tons, recording a decrease of 8% compared to 2021, as the quantity of gypsum and building materials production fell by 6 million, which accounted for 79% of total production. This is due to the reduced demand on those materials. Additionally, the total sales of minerals have reached 57.3 million tons, with a value of 98.974 Omani riyals.

Moreover, with regard to the In-Country Value (ICV), the Ministry of Energy and Minerals continues its efforts by enhancing the participation of local companies in contracts and procurement, as “eTendring” system has been activated by companies operating the supplier registration system (JSRS), to support small and medium-sized companies obtaining business in contracts with service companies and contractors. The number of contracts awarded using e-tendering reached 242 contracts, not to mention the achievements pertaining to workforce localization and the supplier development programs in the petroleum and gas sector. Furthermore, in order to create the plans and initiatives that assistive to supporting the domestic companies and employ Omani cadres, a supervisory committee has been formed with the goal of governing the ICV for minerals sector, in addition to a work team dedicated to contracts, procurement and human resources.

Of the many projects of importance launched in 2022 is the OQ Liquefied Petroleum Gas (OQ LPG) project in Salalah, which is considered to be the first gas processing facility of its kind in Oman, with an approximate total value of 318 million Omani Riyals. This project came as one of the most important energy projects, as it contributes, by extracting liquid natural gas using gas lines and networks, in enhancing value chain of gas in the Sultanate. Additionally, Ibri 2 Solar Power Project has been launched, with a value of 155 million Omani Riyals (approx. 400 million USD) and a 500 MW capacity. The project, at the peak of its productive capacity, will be able to generate sufficient power for around 50,000 households to provide them with electricity, and will further contribute in reducing 340 thousand tons of CO2 emissions yearly.

In conclusion, I would like to thank all the workers of the Ministry of Energy & Minerals, as well as their peers in the companies working in the same field, for their dedication and their tangible efforts which manifested in the development of this sector and maximizing its productivity to serve our beloved country under the prudent leadership of his majesty, sultan Tariq, may Allah protect and preserve him.

Salim bin Nasser Al-Aufi,
Minister of Energy & Minerals.

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Overview on the major oil and gas companies

Introduction

The Ministry of Energy & Minerals pays great attention to the natural resources that fall within the scope of its responsibilities, which are oil, gas, minerals and electricity, in addition to renewable energy and hydrogen, through its keenness and encouragement of companies operating in those sectors in introducing state of the art technology that increased production and leads to reduced costs. In this report, we present the most important indicators and achievements witnessed by this sector in 2022.

The exploration and production companies for oil and gas during the year 2022 drilled, tested and evaluated (56) exploratory and appraisal wells for oil, as well as (12) exploratory and appraisal wells for gas, including some wells that were previously drilled and underwent testing and evaluation this year. Where the results of petrophysical analysis and testing of the productivity of the wells resulted in positive indicators in a number of them, and also led to the announcement of some discoveries in some wells and through which the wells were linked to the production line and entered into the post-exploration phase to the development phase, adding new reserves of oil and gas.

As the expected reserves of crude oil and condensate have reached by the end of 2022 around (4,905) million barrels, up by 1% compared to the previous year, while the expected reserves of natural gas in 2022 amounted to (24) trillion cubic feet, up by 7% from last year.

The number of companies operating in the oil and gas exploration and production concession areas reached 18 by the end of 2022, working in 37 concession areas. The total crude oil and condensate exports for This year amounted to around 318 million barrels. China ranked first in the list of countries importing Omani oil, with a percentage of 81.7%.

Additionally, the Ministry of Energy and Minerals also signed one new petroleum agreement in 2022 with Shell Integrated Gas Oman B.V in concession area No. 11, where the value of the agreed investment for the first period amounted to 105 USD.

Within the context of the keenness of the Ministry of Energy & Minerals on the Omani human cadre, to qualify, train and replace the expatriate workers, and to direct the operating companies to take care of this aspect, this has resulted in an increase in the percentage of Omanization among the companies operating in the upper and lower halves of the oil and gas sector to about 89% in the year 2022, with an increase in the number of Omani employees around 1.3% from the year 2021.

The gross production of electric energy in 2022 reached 41.8 TWh, with a net production of 40.4 TWh, an increase of 2% compared to the previous year. The net electric energy produced from natural gas amounted to 37.2 TWh, constituting 92% of the total energy sources used to produce electricity. The production of electric energy from solar energy continued to increase by 138% compared to the year 2021, with the continued operation of the Ibri 2 station of the Shams Al Dhahirah Company for electricity generation.

In the minerals sector, the Sultanate of Oman's total exports of mineral ores amounted to approximately 36.5 million tons, recording a decrease of 2% compared to 2021, as the amount of building materials exports decreased by 3 million tons. The building materials accounted for 54% of the total amount of exports of mineral ores. While exports of gypsum and dolomite increased by 2 million tons compared to 2021. The total mining licenses issued in 2022 reached 3 licenses, while the exploration licenses issued amounted to 18 licenses.



The most important events of 2022

3 \ 13	3 \ 21	3 \ 28	5 \ 16	6 \ 6	9 \ 25	10 \ 23	11 \ 6
2022	2022	2022	2022	2022	2022	2022	2022
Oman Sustainability Week, 13-17 March 2022	Oil and Energy Exhibition and Conference	Third National Training Center of Outward-Bound Oman (Oman Challenge)	The eighth global Health, Safety & Environment Exhibition and Conference 16 -19	The Oman Electricity and Energy Conference	The Carbon Management Lab, from 25 September to 13 October 2022	A press conference to announce the launch of targeted opportunities and incentives	COP 27
Under the supervision of the Ministry of Energy and Minerals, the Oman Sustainability Week was launched on March 13, 2022, under the patronage of His Highness Mr. Theyazin bin Haitham Al Said, Minister of Culture, Sports, and Youth. The event aimed to provide a rich platform for the sustainability sector to facilitate communication and promote companies operating in this sector. It also aimed to highlight innovative sustainability strategies that align with the United Nations Sustainable Development Goals.	Under the supervision of the Ministry of Energy and Minerals, the Oil and Energy Exhibition and Conference was held from March 23 to 21, 2022, under the patronage of His Highness Mr. Taimur bin Asa'ad bin Tariq Al Said, Chairman of the Board of Governors of the Central Bank of Oman. The conference aimed to develop sustainable solutions for the alternative energy sector such as green hydrogen and others, and to learn about global experiences in this sector and the possibility of benefiting from them in Oman as well. The conference also aimed to “shape the future of the energy industry.”	The Ministry of Energy and Minerals inaugurated the third national training center for the Otis Foundation in Oman (Oman Challenge) at AL-Jabal AL-Akdhare on March 28, 2022, under the patronage of Her Excellency Dr. Madeeha bint Ahmed Al Shibaniyah, Minister of Education. The center is part of the ministry’s corporate social responsibility initiatives.	Under the supervision of the Ministry of Energy and Minerals, the 8th Global Health, Safety, and Environment Conference and Exhibition was inaugurated on May 16, 2022, under the patronage of His Excellency Eng. Said bin Hamoud bin Said Al Maawali, Minister of Transport, Communications and Information Technology. The conference, which runs from May 16-19, 2022, at the Oman Convention and Exhibition Centre, aims to continue the work of creating a sustainable platform for health, safety, and environment to discuss various potential challenges that this sector and the local community may face.	Under the supervision of the Ministry of Energy and Minerals, the Oman Electricity and Energy Conference was inaugurated on June 6, 2022, under the sponsorship of His Excellency Dr. Ali bin Amer Al-Shidhani, Undersecretary of the Ministry of Transport, Communications and Information Technology for Communications and Information Technology. The conference, which runs from June 6-8, 2022, discusses the future of the energy and electricity sector in Oman, renewable energy technologies, energy storage, as well as the transportation network in light of the changes in the sector, energy efficiency, and asset management. The conference also focuses on issues related to electricity and its connection to renewable energy and hydrogen.	On September 25, 2022, the Carbon Management Lab was organized by the Unit for Monitoring the Implementation of Oman Vision 2040, under the supervision of the Ministry of Energy and Minerals, in collaboration with the Environment Authority and the Civil Aviation Authority. The lab continued from September 25 to October 13, 2022, with the presence of dignitaries and representatives from various organizations, academics, and experts. The lab aims to create a comprehensive national strategy and unified implementation plan for achieving carbon neutrality, in line with the development goals in various sectors.	On October 23, 2022, the Ministry of Energy and Minerals held a press conference to announce the launch of opportunities and incentives for investment in the green hydrogen sector, and the official inauguration of the Oman Hydrogen Company. The conference also discussed the details of the high directives to achieve carbon neutrality by 2050 and the establishment of the Oman Center for Sustainability.	On November 6, 2022, based on the high commission, His Excellency Eng. Salim bin Nasser Al Aafi, Minister of Energy and Minerals, led the delegation participating in the 27th session of the United Nations Framework Convention on Climate Change (COP27), hosted by the city of Sharm El Sheikh in the Arab Republic of Egypt from November 6-18, 2022. This emphasizes the importance of taking coordinated actions in partnership with the world to reduce greenhouse gas emissions, address climate change, and work towards the global energy transition.



11\7
2022

11\7
2022

12\5
2022

12\27
2022

12\27
2022

Signing a memorandum of understanding with the Kingdom of the Netherlands in the field of green energy.”

On November 7, 2022, the Ministry of Energy and Minerals signed a memorandum of understanding with the Ministry of Economic Affairs and Climate Policy in the Kingdom of the Netherlands in the field of green energy. This was part of Oman’s participation in the United Nations Climate Change Conference. (COP27)

Signing a memorandum of understanding with the Kingdom of Saudi Arabia in the field of energy.

On November 7, 2022, the Ministry of Energy and Minerals signed a memorandum of understanding with the Kingdom of Saudi Arabia represented by the Ministry of Energy in the field of energy. This was part of Oman’s participation in the United Nations Climate Change Conference. (COP27)

The Green Hydrogen Summit and accompanying exhibition taking place on December 5-7, 2022.

Under the patronage of the Ministry of Energy and Minerals, the Green Hydrogen Summit was held on December 5, 2022, at the Oman Convention and Exhibition Centre, which continued for two days. The event was attended by His Excellency Eng. Salim Al Afi, Minister of Energy and Minerals, as well as dignitaries, experts, investors, and consultants in the field of green hydrogen. The summit aimed to strengthen policies of ICV, localize industries related to the hydrogen sector, enable strategic studies, research, development, and building national capabilities in the field, as well as raise community awareness of clean energy.

Signing a memorandum of cooperation between the Ministry of Energy and Minerals in Oman and the Ministry of Economy, Trade and Industry in Japan in the fields of hydrogen, ammonia fuel, carbon recycling, and methane.

On December 27, 2022, His Excellency Eng. Salim bin Nasser Al Afi, Minister of Energy and Minerals, signed a memorandum of cooperation with His Excellency Yasutoshi Nishimura, Minister of Economy, Trade and Industry in Japan, in the fields of hydrogen, ammonia fuel, carbon recycling, and modern methods for methane production.

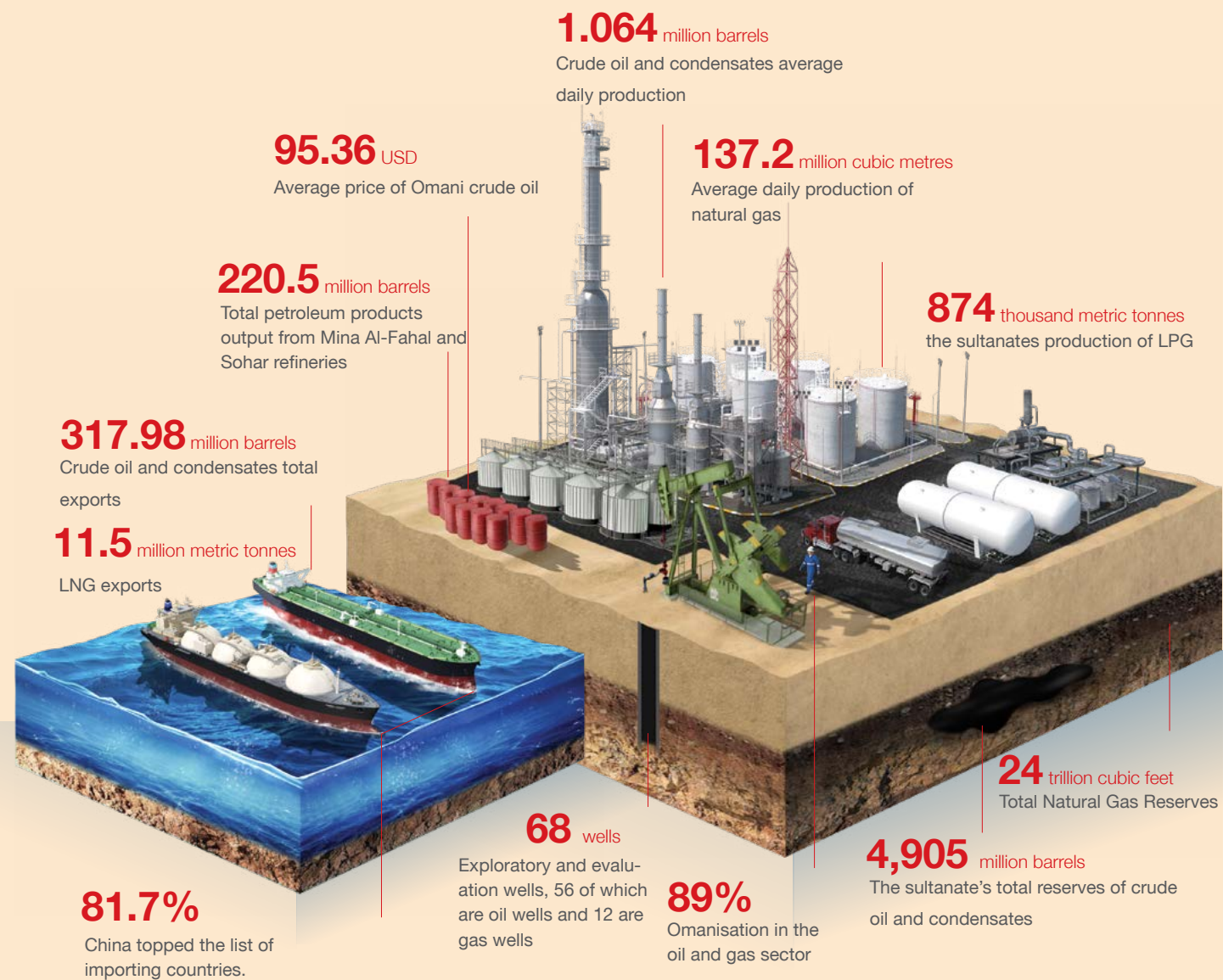
Signing an extension made to the Memorandum of Understanding between the Ministry of Energy and Minerals and the Japan Oil, Gas and Metals National Corporation (JOGMEC).

On December 27, 2022, the Ministry of Energy and Minerals signed a third extension to the Memorandum of Understanding with the Japan Oil, Gas and Metals National Corporation (JOGMEC) in the fields of crude oil, natural gas, and clean energy.



Energy and Minerals Sectors significant indicators

Oil and gas sector indicators



380 fields

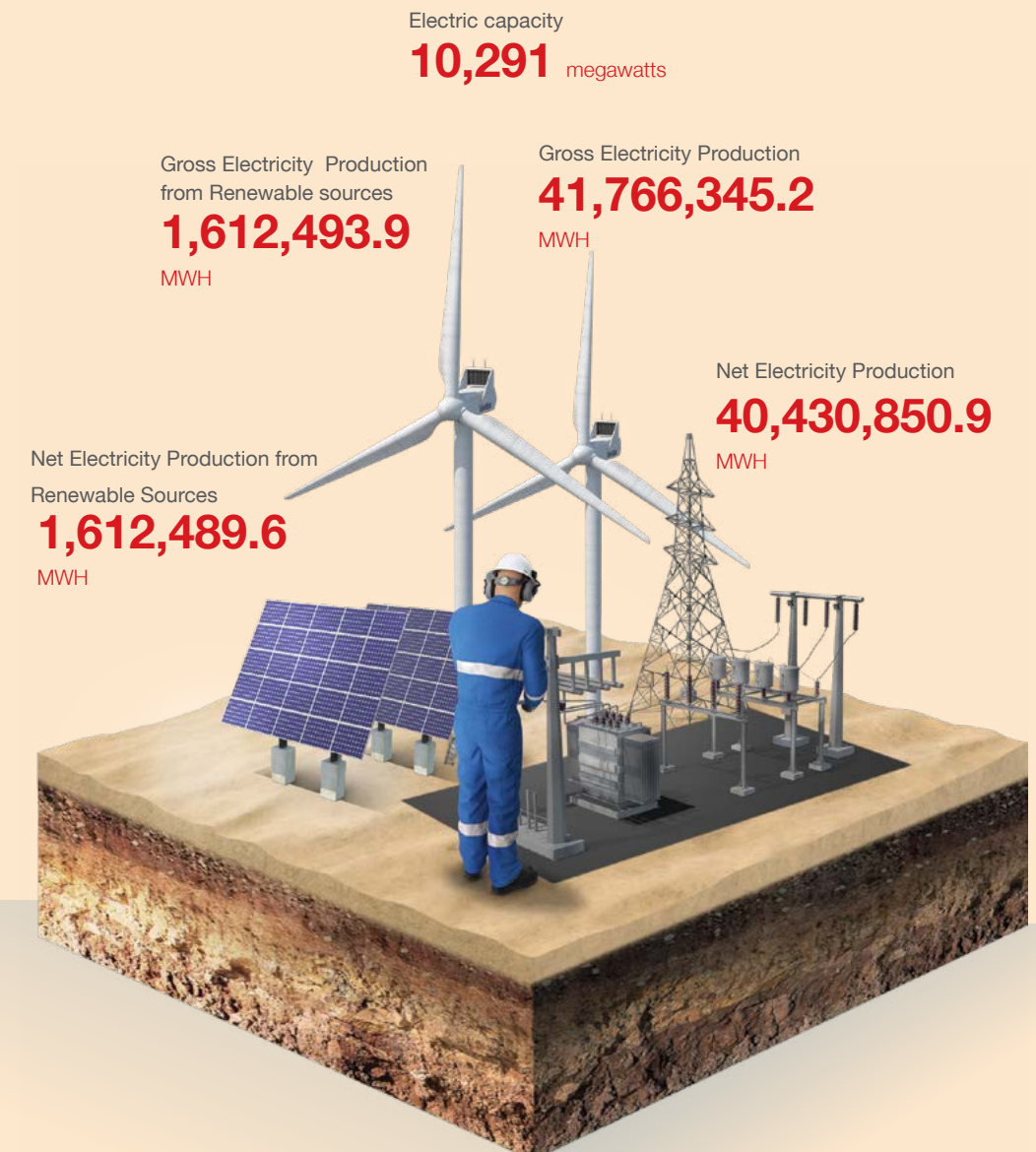
Total number of productive fields in Oman, including 325 oil fields and 55 gas fields



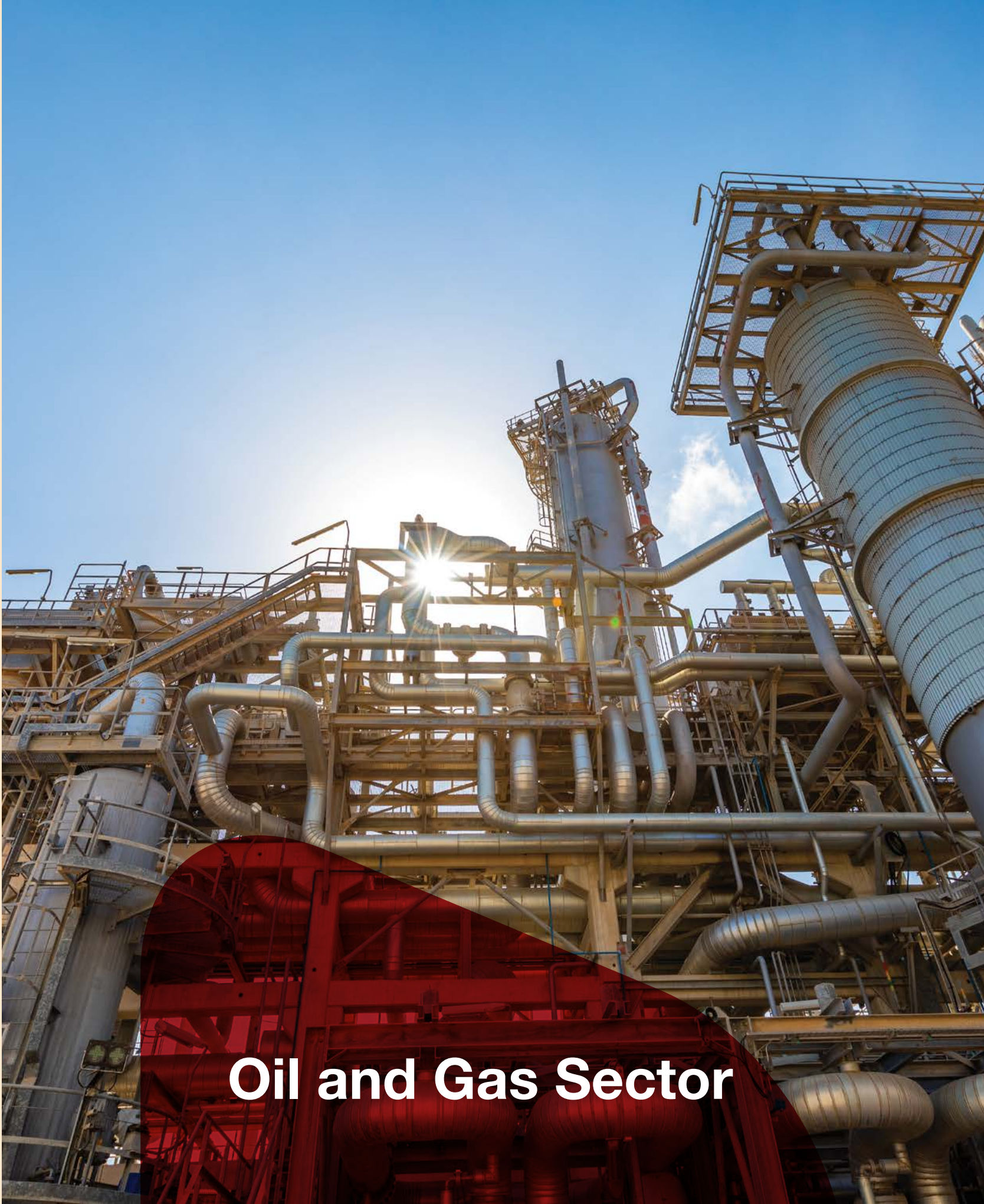
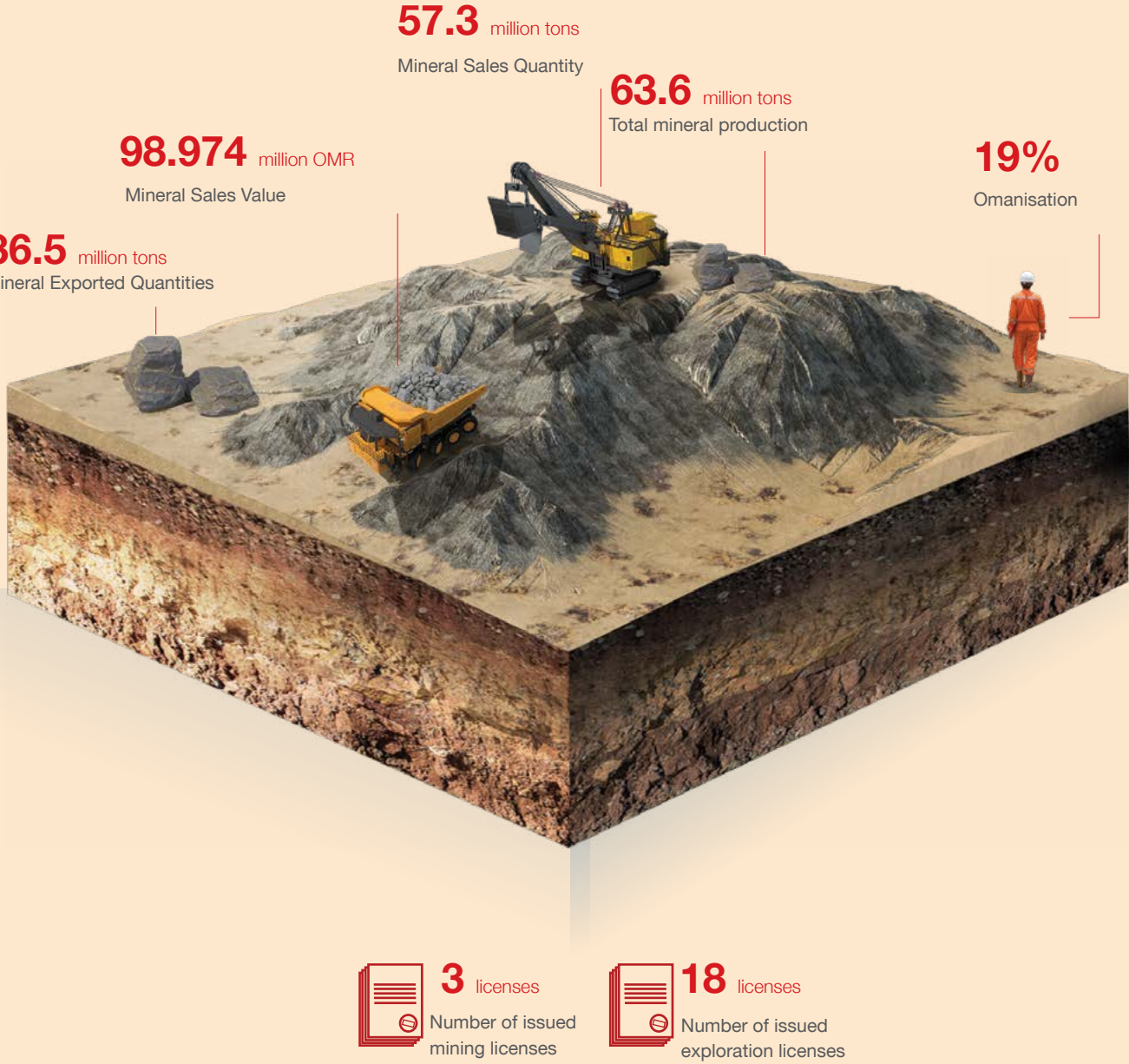
1 agreement

Signing new agreements on the exploration for oil and gas

Electricity and Renewable Energy Sector indicators



Minerals Sector Indicators

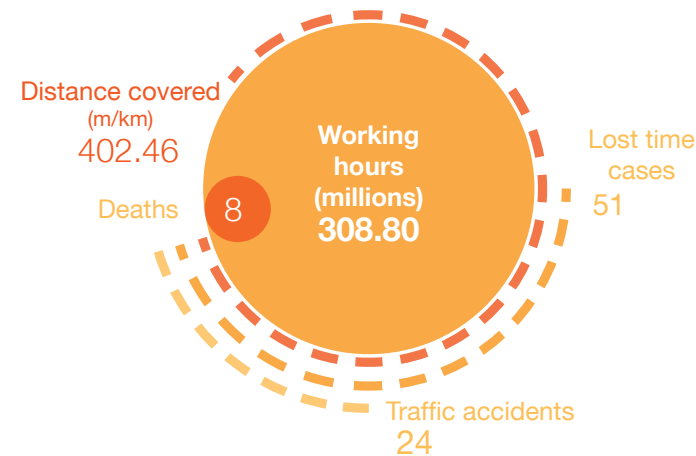


Oil and Gas Sector

■ Health, safety, security and environment (HSSE)

The Ministry of Energy and Minerals is keen on the need for operating companies to adhere to health, safety, environment and security, due to the risky tasks associated with production operations. Health and safety is a priority for operating companies, which are keen to develop awareness programs for employees and improve the work environment to adhere to health and safety, to prevent harm to workers in the oil and gas sectors, and to protect and preserve Oman's environment.

The following are the most important indicators related to health, safety and the environment in the operating companies:



■ Omanisation in the oil and gas sector

The Omanisation rate of companies operating in the upstream and downstream of the oil and gas sector reached about 89% in 2022, with an increase in the number of Omani employees around 1.3% compared to 2021. These figures do not include employees of contracting companies and services operating in the oil and gas sector.

Number of employees and Omanisation percentage in the oil and gas sector

Sector	Item	Total	%	No. of workers
*Oil	National Workforce	17,187	89	19,274
	Expat workforce	2,087	11	
**Gas	National Workforce	615	94	655
	Expat workforce	40	6	
Total (oil and gas)	National Workforce	17,802	89	19,929
	Expat workforce	2,127	11	

*Including exploration and production companies as well as companies that produce both oil and gas

**Include LNG companies

■ Companies operating in concession areas

The number of companies operating concession areas in the field of exploring and production of oil and gas has reached (18) companies, working in 37 concession areas.

Additionally, the Ministry of Energy & Minerals signed a one new agreement with following companies

List of new petroleum agreements for 2022

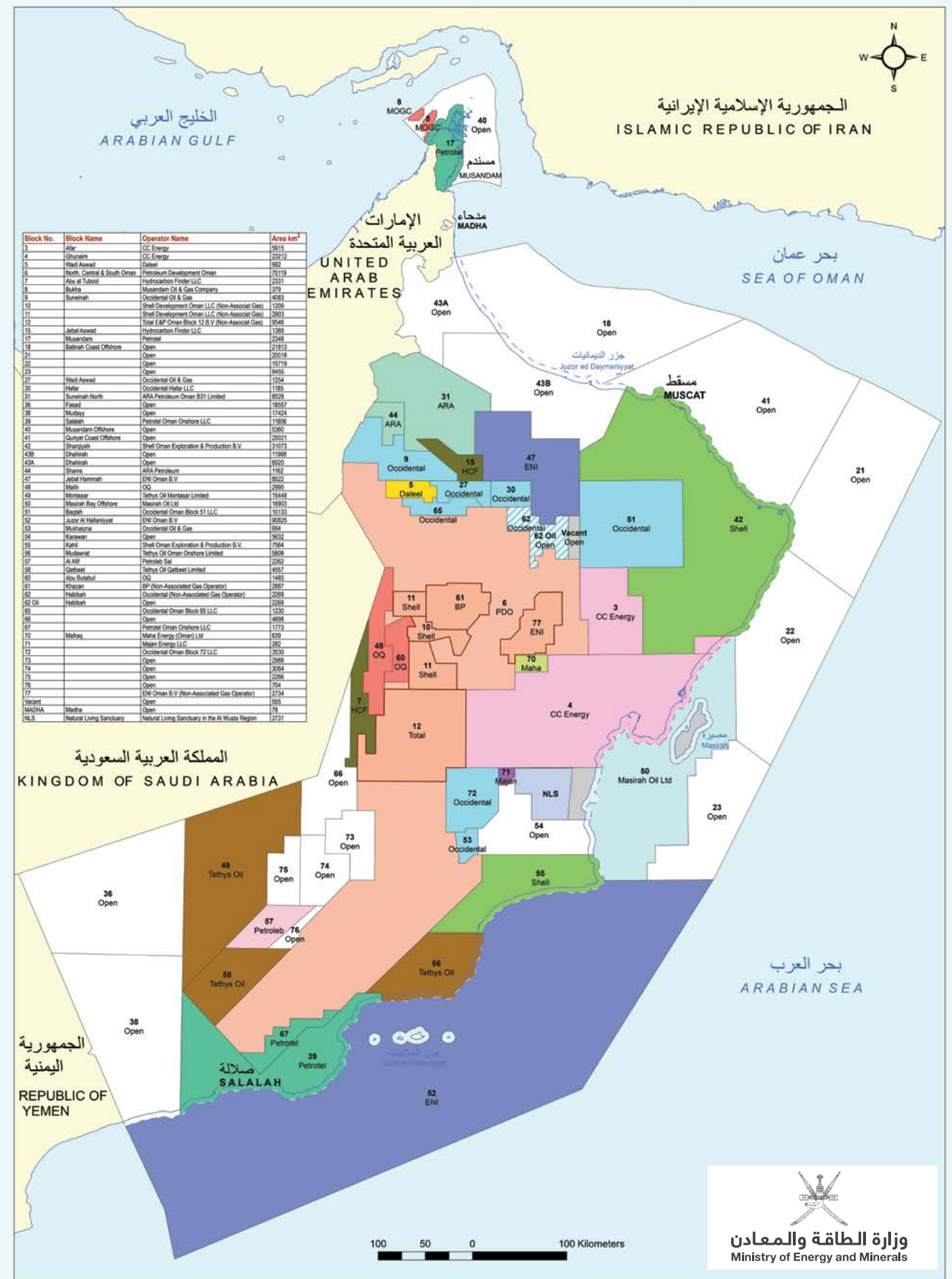
Shell Integrated Gas Oman B.V
11 Areas
The agreement was signed on 15 September 2022
First phase investment reached 105 million USD

List of oil companies operating concession areas in the Sultanate until the end of the year

No.	Company's name	Area No.	Company's Nationality	Agreement signing date
1	Petroleum Development Oman LLC	6	Omani	19/12/2004
2	Occidental Oil and Gas	9	American	23/1/2017
	Occidental Oil and Gas	27	American	15/6/1998
	Occidental Hafar LLC	30	American	14/11/2017
	Occidental Mukhaizna	53	American	21/6/2005
	Occidental Oman Gas Co	62	American	22/11/2008
	Occidental Oman block 51 LLC	51	American	16/12/2018
	Occidental Oman block 65 LLC	65	American	16/12/2018
	Occidental Oman block 72 LLC	72	American	28/2/2019
3	Ara Petroleum LLC	44	Omani	21/7/2002
	Ara Petroleum Oman Block 31 Ltd	31	Omani	14/11/2017
4	Daleel Petroleum LLC	5	Omani/Chinese	7/8/2019
5	CC Energy Development (Oman branch)	3 & 4 *	Lebanese	9/2/2003

No.	Company's name	Area No.	Company's Nationality	Agreement signing date
6	Hydrocarbon Finder E&P	7	Omani	28/1/2016
7	BP Exploration (Epsilon) Ltd.	61	British	22/1/2007
8	Petrotel Oman LLC	17	American	23/5/2009
	PetroTel Oman Onshore LLC	39 & 67*	American	26/3/2013
9	Masirah Oil Company Limited – Oman Branch (Masirah Oil Limited)	50	British	28/2/2011
10	Shell Oman Exploration and Production B.V.	42	Dutch	11/10/2011
	Shell integrated gas Oman B.V	10	Dutch	21/12/2021
	Shell Oman	55	Dutch	10/10/2019
	Shell integrated gas Oman B.V	11	Dutch	15/9/2022
	OQ	60	Omani	19/3/2011
11		48	Omani	31/1/2017
12	Musandam Oil and Gas Company LLC	8	Omani	1/1/2019
13	Tethys Oil Oman Onshore Limited	56	Swedish	20/11/2014
	Tethys Oil	49	Swedish	14/11/2017
	Tethys Oil Qatbeet Limited	58	Swedish	5/7/2020
14	Eni Oman	52	Italian	14/11/2017
	Eni Oman B. V	47	Italian	14/1/2019
	Eni Oman B. V	77	Italian	31/7/2019
15	Petroleb Sal	57	Lebanese	10/1/2018
16	Total	12	French	19/2/2020
17	Maha Energy (Oman) Limited	70	Swedish	5/10/2020
18	Majan Energy L.L.C	71	Omani	8/2/2021

SULTANATE OF OMAN CONCESSION BOUNDARIES



This map is not an authority on international boundaries.

Print Date : 27-Nov-2022

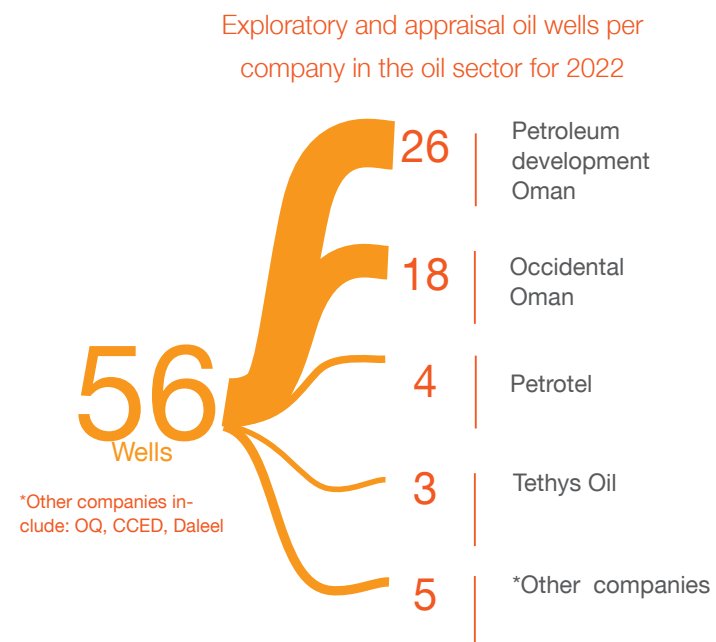
A low-angle, silhouetted photograph of an oil worker wearing a hard hat and operating a pumpjack. The worker is positioned on the right side of the frame, facing left. The pumpjack's long arm and counterweight are visible, extending upwards. A pressure gauge is mounted on the pumpjack's structure. The background is a bright, hazy sunset sky, with the sun's glow creating a strong backlight effect. The overall color palette is dominated by warm, golden-yellow and orange tones. A dark red, semi-transparent shape overlaps the bottom right corner of the image, serving as a background for the text.

Oil Sector

1. Exoloration
2. Reserves
3. Production
4. Crude oil and Condensates Exports
5. Price of Omani Crude Oil
6. The Refinery Industry

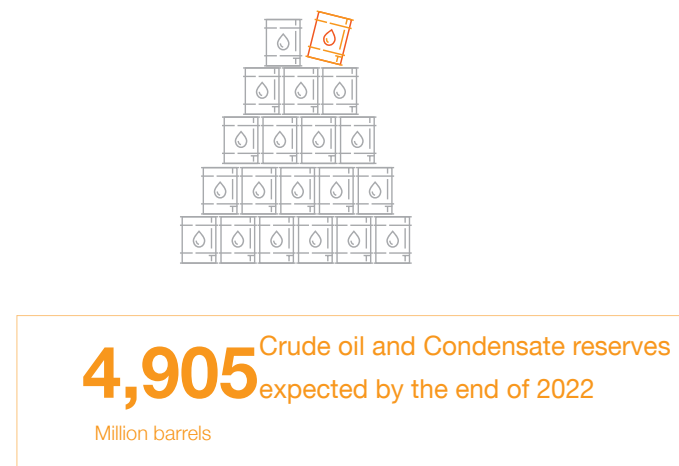
1. Exploration

During the year 2022, exploration and production companies drilled, tested, and evaluated 56 oil exploration and appraisal wells, including some that were previously drilled and tested in 2022. The results of petrophysical analysis and production testing of the wells yielded positive indicators in a number of them, adding new oil reserves



2. Reserves

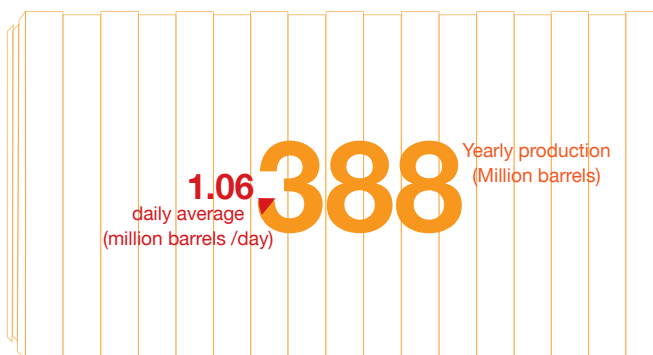
The total expected reserves of crude oil and oil condensates for the Sultanate by the end of 2022 reached about 4,905 million barrels, higher than the previous year by 1%. Furthermore, the reserves of Petroleum Development Oman were around 62% of the total oil and oil condensate reserves for 2022.



3. Production

The average daily production of crude oil and condensates during the year 2022 was about 1.06 million barrels per day, compared to approximately 971 thousand barrels per day in 2021, representing an increase of 9.6%. Oman was able to achieve production levels in line with the production curb agreement signed with the members of the Organization of the Petroleum Exporting Countries (OPEC) and other non-OPEC countries during the year 2022, with the aim of contributing to achieving a balance between global oil supply and demand.

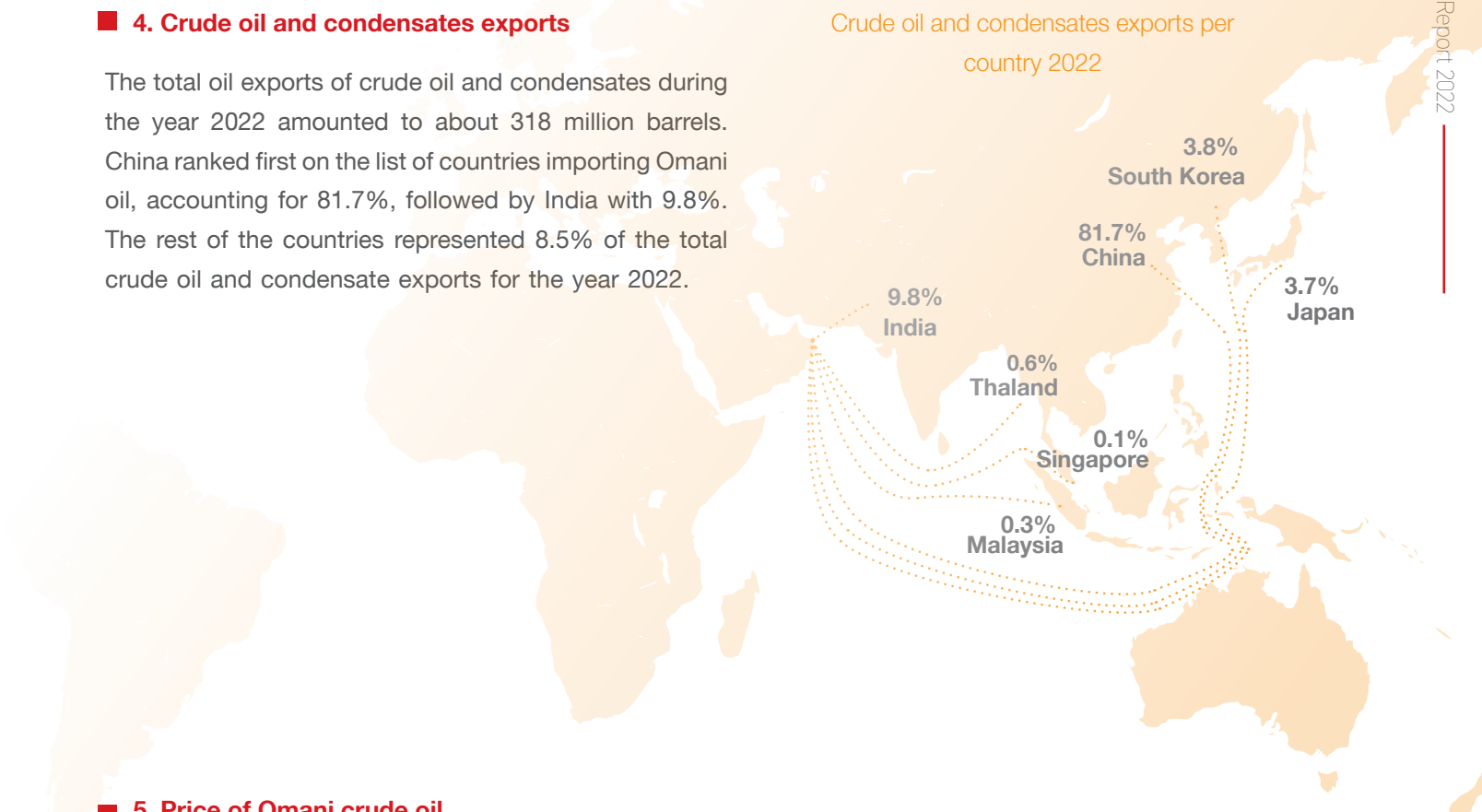
Total crude oil and condensates production by the end of 2022



4. Crude oil and condensates exports

The total oil exports of crude oil and condensates during the year 2022 amounted to about 318 million barrels. China ranked first on the list of countries importing Omani oil, accounting for 81.7%, followed by India with 9.8%. The rest of the countries represented 8.5% of the total crude oil and condensate exports for the year 2022.

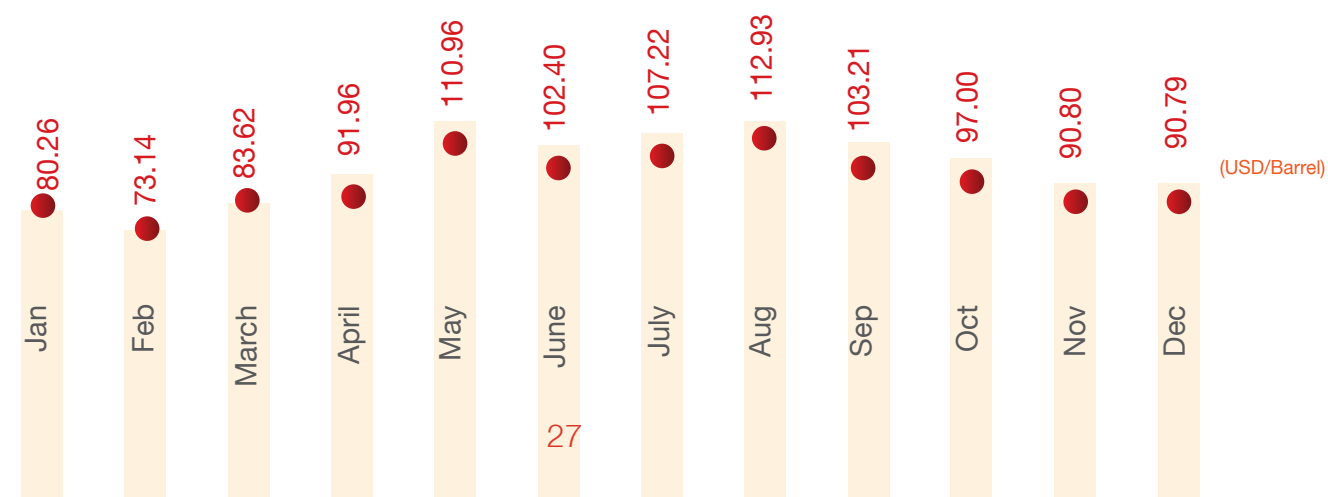
Crude oil and condensates exports per country 2022



5. Price of Omani crude oil

The average price of Omani crude oil during the year 2022 was around 95.36 USD per barrel, representing an increase of 48% compared to 2021. The price of a barrel of Omani oil ranged between 73.14 USD per barrel as a minimum in February and 112.93 USD per barrel as a maximum in August of the same year.

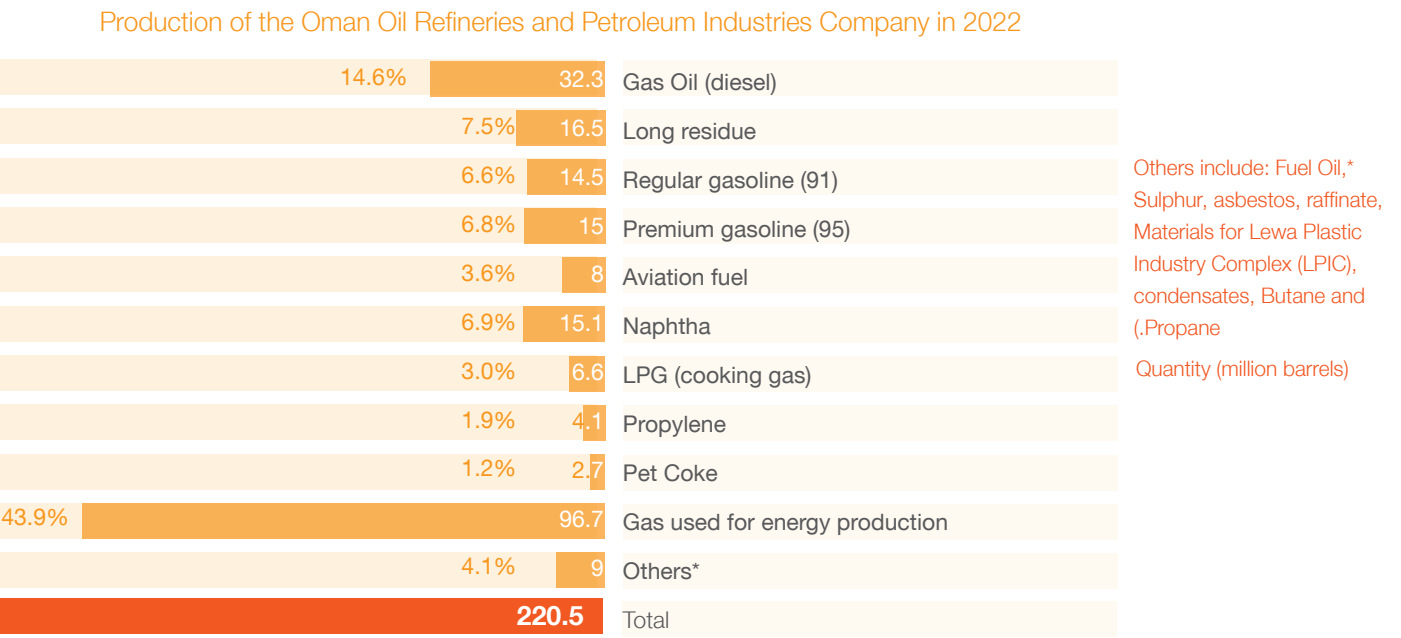
Average prices of Omani crude oil for the year 2022



6. Refining Industry

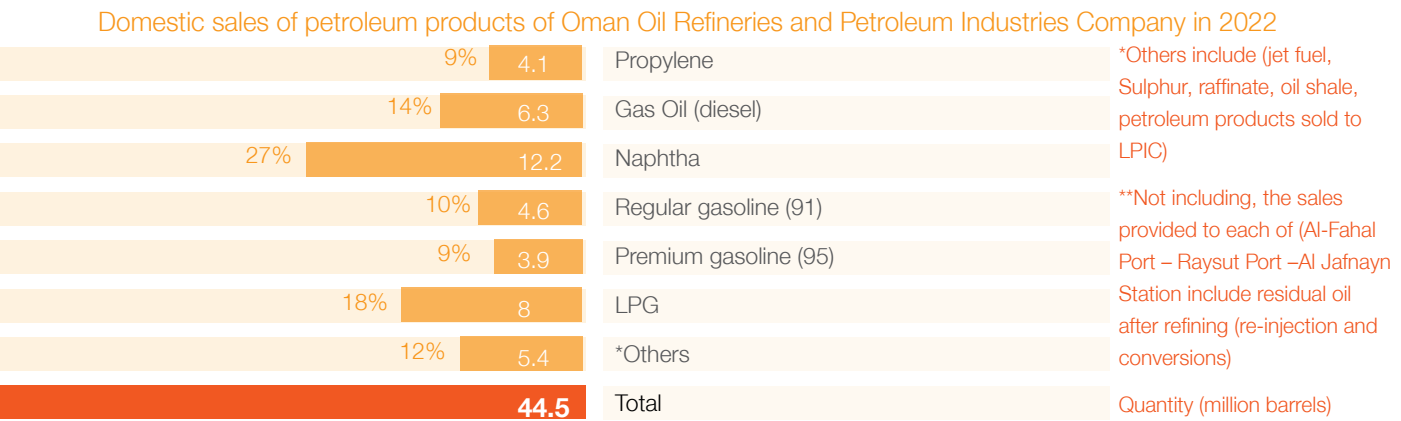
6.1 Production

total production of petroleum products by Oman oil Refineries and Petroleum Industries Company, affiliated to OQ, amounted to about (220.5) million barrels. The production of the Mina Al Fahal refinery amounted to about (34.4) million barrels, the Sohar refinery production amounted to about (86.1) million barrels, while the production of the Salalah LPG production plant amounted to about (100) million barrels. The percentage of gas production used for energy production amounted to about 44% of the total production of the Refineries and Petroleum Industries Company of OQ for the year 2022 .



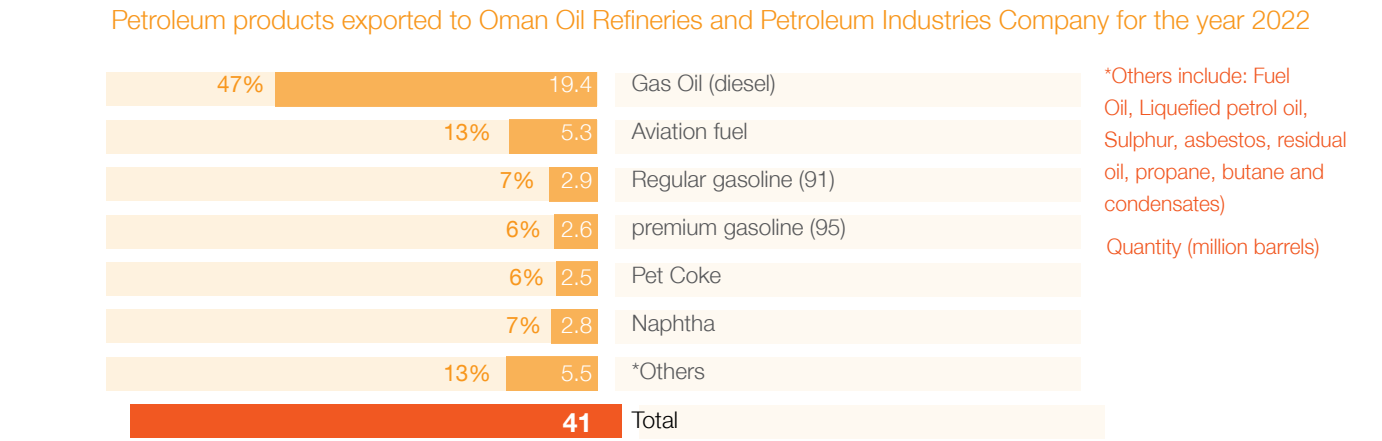
6.2 Domestic sales of petroleum products:

** The total sales of the OQ Refineries and Petroleum Industries Company of petroleum products during the year amounted to about (44.5) million barrels, of which about (0.8) million barrels were sold through the Mina Al Fahal Refinery, and about (43.3) million barrels were sold through Sohar Refinery and about (0.4) million barrels were sold through the Salalah liquefied petroleum gas production plant. Naphtha sales accounted for the largest percentage of sales, the Refineries and Petroleum Industries Company, affiliated to OQ with 27% of the total domestic sales for petroleum products for the year 2022.



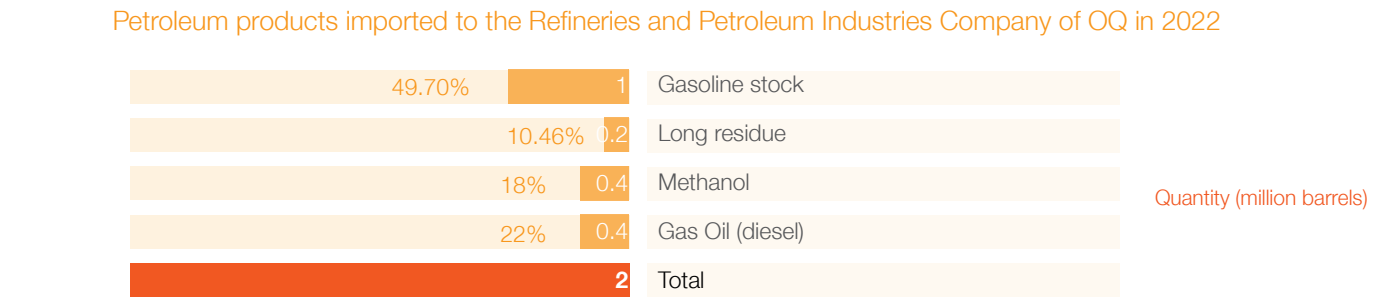
6.3 Exported petroleum products

The total petroleum products exported by Oman Oil Refineries and Petroleum Industries Company through the Sohar refinery was around 37.9 million barrels, about 0.2 million barrels through the Mina Al-Fahal refinery, and around 2.9 million barrels through the Salalah LPG plant. The quantity of Gas Oil (diesel) exports formed the largest proportion of the exported petroleum products, accounting for about 47% of the total petroleum products exported for the year 2022.



6.4 Imported petroleum products

The total petroleum products imported to the Refineries and Petroleum Industries Company of OQ during the year amounted to about (2) million barrels, as the quantities were imported through Sohar Refinery of the Refineries and Petroleum Industries Company of OQ for the year 2002.





Gas Sector

1. Exploration
2. Reserves
3. Production
4. Consumption
5. LNG and NGL exports
6. LPG production

1.Exploration

In 2022, exploration and production companies drilled, tested, and evaluated 12 exploration and appraisal gas wells. Some previously drilled and tested wells were also included. The results of petrophysical analysis and well productivity tests yielded positive indicators in several wells, adding new gas reserves.

Exploratory and evaluation
wells for the gas sector in 2022

PDO	Daleel
11 wells	1well

2.Reserves

The expected natural gas reserves for the Sultanate by the end of 2022 amounted to around (24) trillion cubic feet, an increase of 7% compared to the previous year. The expected reserves for Petroleum Development Oman (PDO) accounted for around 47% of the total expected reserves of natural gas in Oman by the end of the year.

Expected reserve of natural
gas at the end of 2022

24
(Trillion Cubic Feet)

3.Production

The average daily production of natural gas in Oman in this year was about 137.2 million cubic meters, with associated gas production accounting for 20.1% of the total production at a rate of 27.6 million cubic meters per day, while non-associated gas production accounted for 79.9% of the total production at a rate of 109.6 million cubic meters per day. In addition to this production, natural gas was imported from Dolphin company for Energy at a rate of 5.4 million cubic meters per day during the year.

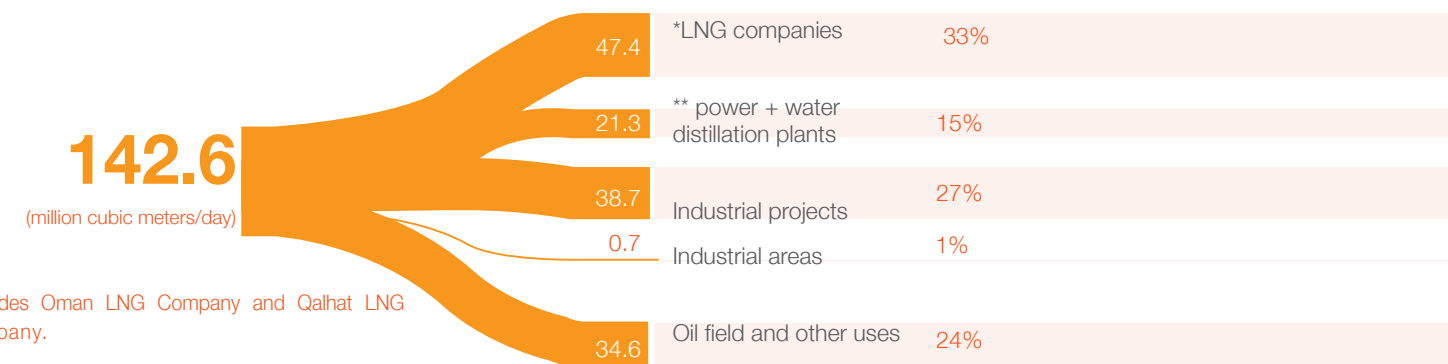
Total natural gas production and import for 2022

	Annual production (million cubic meters)	Daily average (million cubic meters/day)
Associated gas	10,063.92	27.6
Non-associated gas	40,020.79	109.6
Total production	50,084.71	137.2
Total imports by Dolphin	1,977.16	5.4
Total import and production	52,061.87	142.6

4.Consumption

The average daily consumption of natural gas in Oman in 2022 was about 142.6 million cubic meters, with Oman LNG and Qalhat LNG projects ranking first in terms of natural gas consumption rate during the year at around 47.4 million cubic meters per day, accounting for 33% of the total natural gas consumption rate in 2022. Followed by the amount of consumption of local industrial projects by 27% of the total, field operations and other uses by 24%, followed by electric power generation and water desalination plants by 15% of the total, and the consumption of industrial areas formed about 1% of the total rate of natural gas consumption.

Natural gas consumption rate by sectors for the year 2022



*Includes Oman LNG Company and Qalhat LNG Company.

** Includes Ministry of Defence, Sultan Qaboos University Power and water production stations.

5. LNG and NGL exports

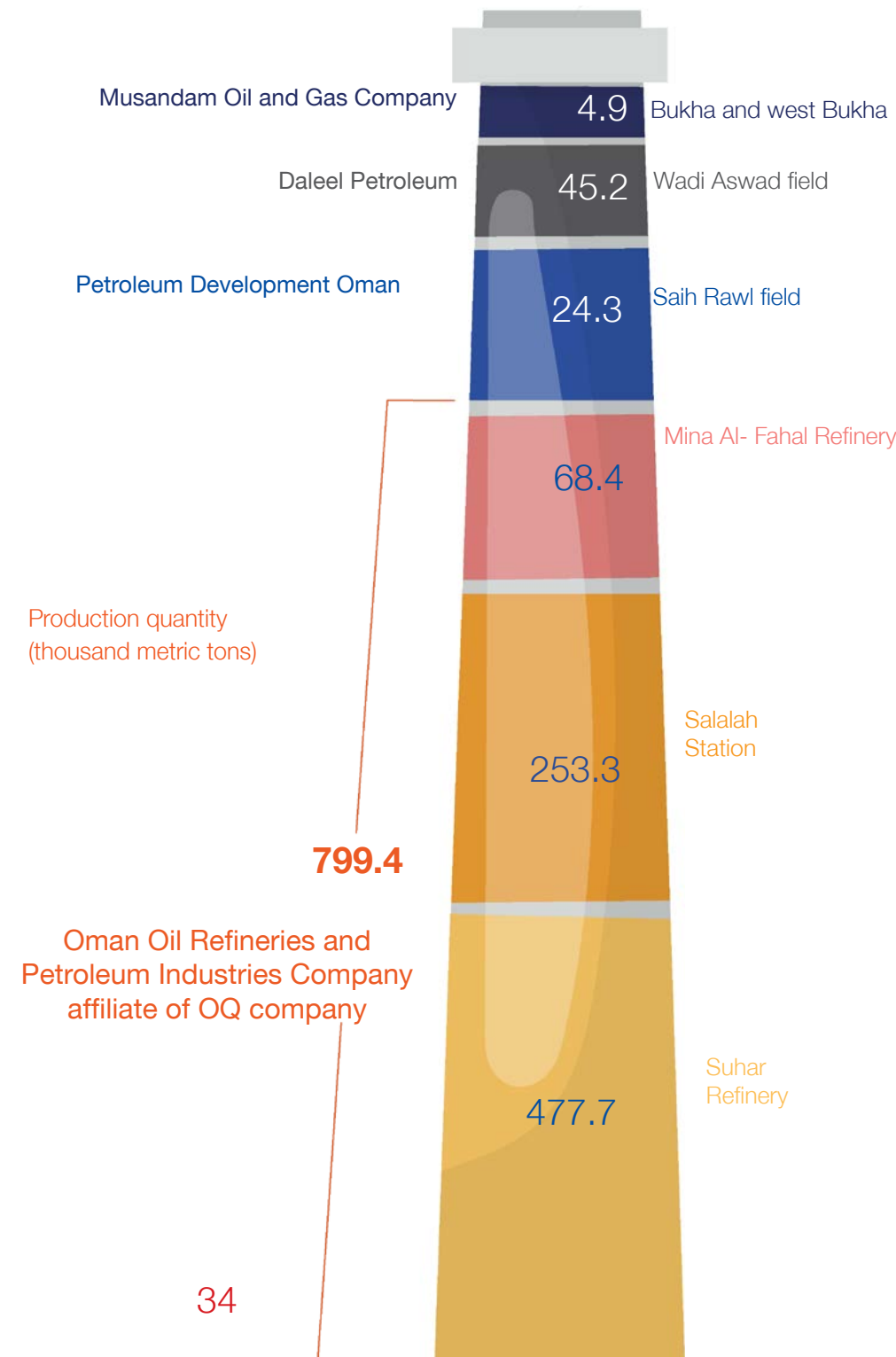
Oman's exports of liquefied natural gas (LNG) amounted to around 11.5 million metric tons in this year, shipped in 176 cargoes. The exports of natural gas liquids (NGLs) amounted to 0.206 million metric tons, dispatched over 35 shipments. Oman LNG accounted for 72% of the total LNG exports, while Qalhat LNG accounted for about 28% of Oman's total LNG exports by the end of 2022.



■ 6. Production of Liquefied Petroleum Gas (LPG)

The total production of LPG during 2022 reached 874 thousand metric tonnes. Quantities produced by Oman Oil Refineries and Petroleum Industries Company affiliate of OQ company (Mina Al Fahal, sohar Refinery and Salalah Station) constituted 799.5 thousand metric tonnes, i.e. 91% of the total LPG production, followed by 9% for the rest of the companies.

LPG production by Company and source for 2022



Major projects in the oil and gas sector

The Oil and Gas industry has been the foreground of economic diversification in ensuring sustainable development. Going on with this clear objective, the Ministry has sought to supervise the implementation of many projects with oil and gas operating companies.

To achieve in-country value, create job opportunities and find sustainable Oil and Gas production, the Ministry as an industry leader ensures the necessity of keeping pace with the new technologies and establishing new projects that add quality and ensure continuity of production. The following are the most major oil and gas projects undertaken by the operators:

■ Petroleum Development Oman (PDO)

Project Delivery

The Project Delivery department maintained its high level of activities despite ongoing COVID-19-related challenges. In terms of cost and schedule performance, the team managed to achieve their original plan, even though Coronavirus constraints continued to affect global supply chains and the movement of personnel.

The Corporate Scorecard target for capital projects was met with the department managing to reach all capital project milestones safely and within the Project Delivery Capex and Opex budget.

The changeover of the Marmul Polymer Phase-3 project was achieved, and another landmark was the commissioning of the Rima Water Treatment Plant, after the successful implementation of a DBOOM (Design-Build-Own-Operate-Maintain) contract.

This facility is an eco-friendly alternative to deep water disposal and is a world-class addition to our portfolio. The scheme uses gravitational oil and water separation and natural biological treatment, which is an emerging breakthrough technology used for the first time in Oman.

The plant is capable of processing up to 65,000 cubic metres of wastewater a day, higher than the design capacity of 40,000 m³/day, cutting high-energy consumption by 10 megawatts and GHG emissions by 53,000 tonnes a year.



■ Occidental Oman

Exploration & Major Projects

Oxy Oman's 2022 exploration program resulted in 12 discoveries, distributed as: 6 discoveries in Block 9 with 86 percent success rate; 2 discoveries in Block 27 with 100 percent success rate; 2 discoveries in Block 53 with 100 percent success rate; and 2 discoveries in Block 65 with 67 percent success rate. The exploration program also completed 2D seismic reprocessing in Block 72.

In 2022, Mukhaizna Facilities work focused on well hookups and off-plot infrastructure, facility improvement projects, permanent power conversions, and debottlenecking scopes. In addition, off-plot laterals, headers and on-plot facilities were installed to support production of 16 new Thuleilat wells and to hook-up 40 wells to the Casing Vapor Recovery (CVR) network. Several debottlenecking projects were also progressed at the production facilities and in the off-plot gathering infrastructure.

The Oman North 2022 program primarily focused on developing production gathering facilities through the expansion of Safah South Wedge E Area Phase 2 and 3; and progressing additional gas compression facilities (Wadi Latham and Jalal Gas Compressions) which added 90 MMSCFD compression capacity in Block 9 for gas lift and sale. The company also progressed the Far West and Al Barakah water injection pumps with a capacity of 60 MBWD.



■ Daleel Petroleum LLC

Atmospheric Pressure Flare Recovery:

Objective: The packages are required to reduce the flaring in both stations (DPS and B Block station) in order to reduce the greenhouse gas emissions and utilize the recovered gas by exporting it or use it locally.

Achievements: The project successfully commissioned in BBS on 18-Oct-2022 & DPS 27-Oct-2022.

Business Impact: The project result in avoiding flaring of around 600 MMSCF annually, which is equivalent to around 40,000 tons of CO₂e (the equivalent of taking 8300 cars off the road). This project is a major milestone in Daleel journey towards Zero flaring and Daleel commitment towards the society as a major player in Oman's oil and gas industry.

Off-Plot Projects: Natih 16IN Header Replacement:

Objective: To replace the corroded CS (carbon steel) 16IN & 10IN Natih headers with new CS+PE (polyethylene) 16IN Header and 8IN branch headers.

Achievements: Successfully constructed a total of 20.2 km of new CS+PE headers, which was commissioned on 25 Dec 2022.

Business Impact: Having a new and an internally protected header greatly reduces chances of leakage and hence reduces the oil deferment losses.

Additional Separation Facilities:

Objective: Install additional bulk fluid separation facilities at Daleel gathering stations (DPS and B Block station) to cater & increase production in future and to provide for alternate facilities in case of shut down of existing facilities for maintenance.

Achievements: Project team members were able to accomplish more than 700 days LTI free during the construction stage of the project although it was executed on brown field. The project was successfully commissioned in DPS on Jan-22 & BBS on Apr-22.

Business Impact: Provide additional process trains for separation to accommodate the additional production in the coming years as per Daleel Business Plan. Ease the constraints, which are currently experienced by production and maintenance departments by providing sparing capacity for maintenance activities. Improvement in oil export specification by increasing the residence in Free Water Knock Outs Tanks leading to improve Basic Sediment & Water and salt content.



■ OQ

OQ Ammonia:

Located in the South of Oman, OQ's Salalah Ammonia Project represents a USD 463 Mn investment in a 1,000 metric tonnes per day (MTPD) capacity ammonia plant. Though the project faced some challenges completing the initial acceptance, the plant commenced production in 2022 and managed to export around 77 tonnes of Ammonia to customers around the globe. Aside from fertilizers, the plant will support the manufacture of synthetic resins, fibres and polyurethanes.

Total investment: USD 463 Mn

Overall project progress until end of 2022 is 99%

OQ8

OQ8 is located in the Special Economic Zone Authority of Duqm (SEZAD), 600 km South of Muscat. The refinery aims to produce light/middle distillates at a high-efficiency rate, focusing on naphtha, jet fuel, diesel, and LPG as its primary products. The project is strategic partnership between OQ and Kuwait Petroleum International (KPI). Initial Acceptance is expected to be achieved by December 2023.

Total investment: USD 8,280 Mn

Overall project progress until end of 2022 is 97%



OTTCO

Oman Tank Terminal Company (OTTCO), part of OQ Group, is Oman's independent tank storage company. The project started in 2014 with the objective to develop Oman's crude oil storage hub in Ras Markaz, 70 km south of Duqm, with a potential total storage capacity of up to 200 million barrels. At the end of 2022, Ras Markaz Crude Oil Park (RMCOP) project achieved readiness to receive the first crude cargo by the first week of January 2023. The overall provisional acceptance of the project is expected by March 2023.


Total investment: USD 459 Mn

Overall project progress until end of 2022 is 94%


■ In-country value (ICV)

The Ministry continues its efforts in the energy and metals sectors, aiming at enhancing the ICV by increasing the local companies' contribution to contracts, procurements as well as establishing employment and training programs for Omanis. A whole range of achievements have been reached in the areas of localizing workers' opportunities, developing programs for oil and gas suppliers and increasing the share of small and medium-sized companies' contribution to oil and gas contracts. The following are the most prominent projects and programs established in 2022 for the oil and gas sector:


Regarding the local supplier development program, the following was



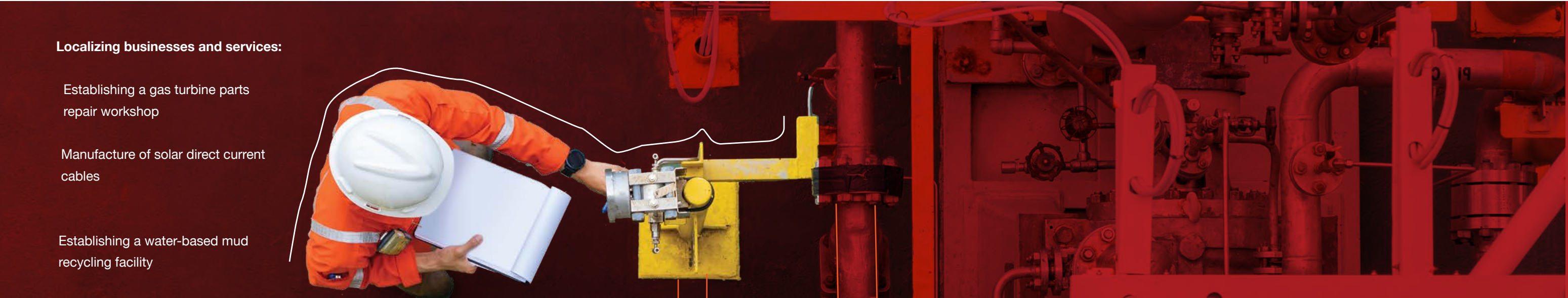
Provision of rental diesel generator services



Develop a live line crew



Fiscal Metering Upgrade Project



with respect to localizing the opportunities of a joint venture between the said companies based on the amount of demand on them. The project was concerned with determining the need and demand of the sector on chemicals consumed by the operating companies and defining the expected quantities for the coming years and presenting them to the investors.

Initial offers have been received from the investors, and both technical and commercial evaluations are in progress in order to reach the method of supporting the localization of the chemicals industry in the Sultanate.

Regarding the legislative aspects, the local content certificate project is in progress. The scope of work and goals have been determined, the work team has been formed and working with the consultant has begun in the last quarter of 2022. The project is currently in development.

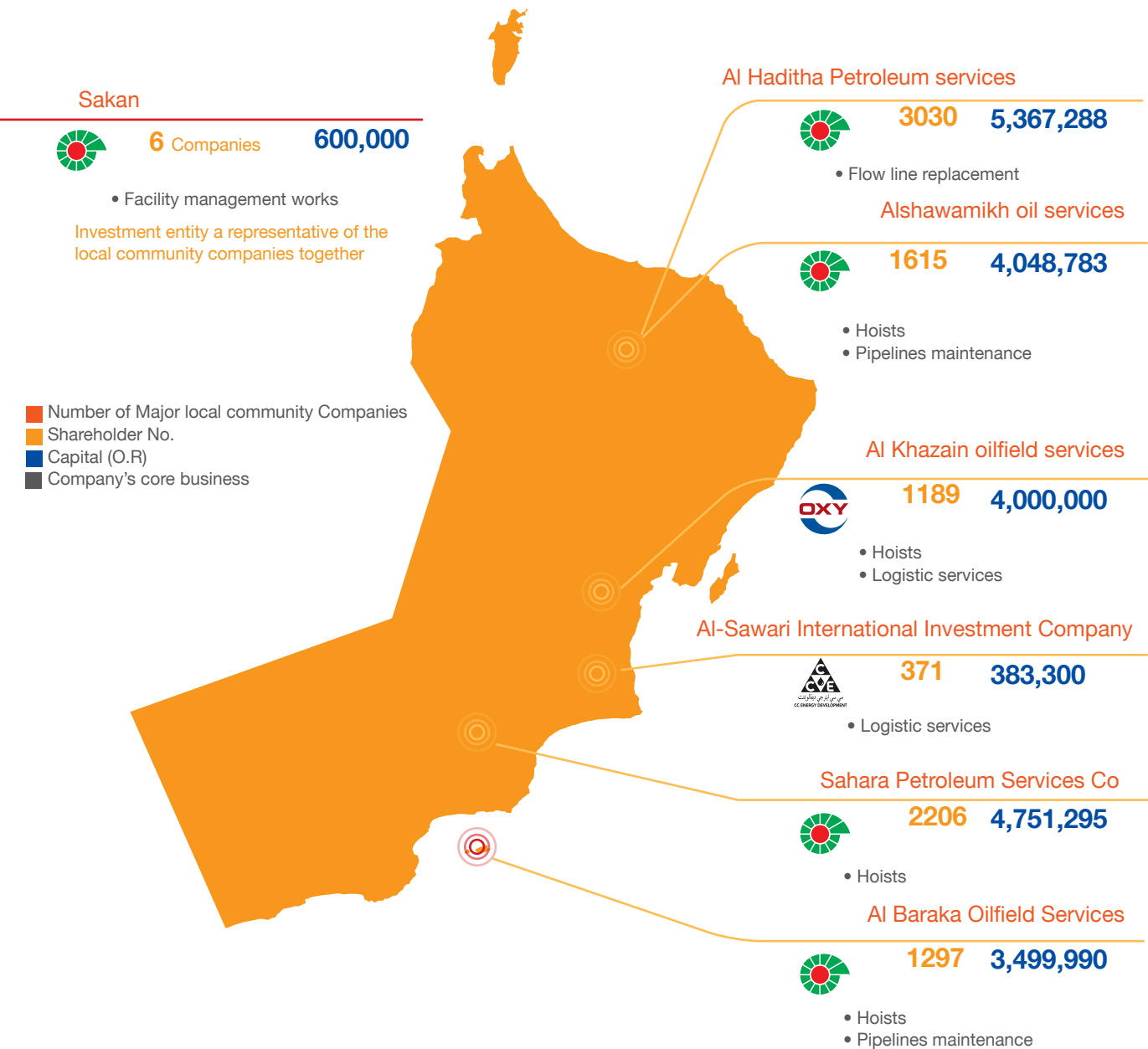
Holding a workshop, in cooperation with the SMEs Development Authority and the Oman Chamber of Commerce & Industry, to introduce the Joint Supplier Registration System (JSRS), the services provided by the said system and receiving the questions raised by the SMEs regarding the same.

In the context of ICV, a supervisory committee has been formed to govern the ICV for minerals sector and, form a work team for contracts, procurements and Human resources, with the goal of formulating the plans and initiatives that help in supporting the local companies and hiring Omani cadres. Additionally, meetings were held with mining companies to agree upon the objectives of the aforementioned supervisory committee and the work team. Setting the baseline and analyzing the current information and situation is currently in progress in order to lay the plans and milestones needed to develop the ICV.

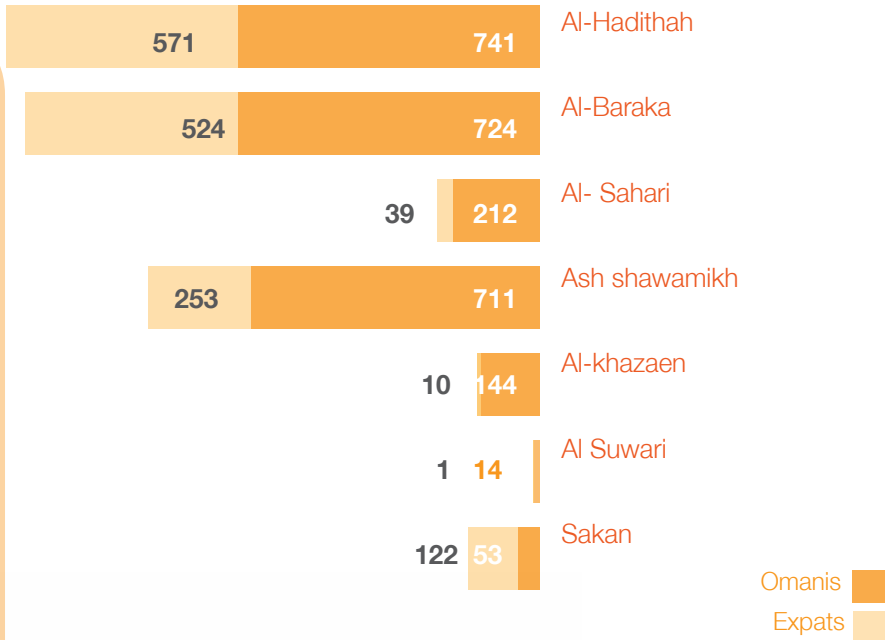
Receiving and meeting with multiple representatives of local companies and addressing their enquiries on the controls and laws pertaining to ICV, and coordinate for those local companies to communicate the operating companies to offer their new technologies and services.

Major Local Community Companies

These are seven closed Omani joint-stock companies that operate in the field of oil and gas in the oil concession areas and contribute to the development of communities in these areas. Five of these companies have direct contracts with the Petroleum Development Oman, and have been established in the main field of the oil industries, namely: Al Haditha, Al Barka, Al Shawamikh, Al Sahari, and Sakan. It is worth mentioning that Al Khazain Company has a direct contract with Occidental and Al Suwari Company has a direct contract with CCED. As of the end of 2022, the number of shareholders in six of these companies was about 9,708 shareholders, all of whom are from concession areas. These companies offer a range of core activities in the oil and gas sector, including logistics services, electrical services, equipment leasing, road maintenance, civil and construction services, well maintenance operations, and pipeline maintenance. Oil and gas companies provide support and assistance to major local companies to ensure the sustainability of their activities. These companies have contributed to diversification of income sources for citizens living in concession areas. They have also helped to replace foreign companies with national companies and to advance further in the field of oil industries, as well as creating job opportunities, qualifying, and training Omanis. The number of Omani employees in these companies has reached approximately 2,599 employees.



(Workforce and rate of Omanisation in the major local community companies (2022)



■ Social Responsibility

The Ministry of Energy and Minerals places a great emphasis on corporate social responsibility by directing companies to allocate budgets for social responsibility projects and initiatives. The Ministry also enhances the efforts of companies in projects that have an effective role for the community and are concerned with sustainability, in line with the national vision for Oman in 2040. Additionally, the Ministry contributes to the development and enhancement of various sectors in the Sultanate. In 2022, the energy and minerals sector agreed to support three projects with a total amount of 2.5 million Omani rials, contributed by six companies, including the Development Petroleum Oman, Occidental Oman, BP Oman, OQ, Daleel, and CC Energy



Joint projects for 2022:

Ittin Natural Park in Dhofar:

The Ittin Natural Park project is one of the most important joint social responsibility projects for the year 2022. The project will be supported by six oil and gas companies, with a 40% share, and the Dhofar Municipality, with a 60% share. The project focuses on providing camping facilities for tourists and providing all necessary camping equipment. It also includes plans for outdoor seating areas, cafes, a theater, and walking paths that blend and harmonize with the Omani environment and surrounding nature. The project contributes to increasing green areas and attracting tourists throughout the year, and will provide job opportunities for small and medium-sized enterprises.

Project of providing green houses for the Agricultural Experimental Station at the college of agricultural and marine sciences:

I apologize for the mistake. The main objective of this project is to design, build, and improve greenhouses for crop production and sustainability, in line with the various governorates of Oman. The project also aims to increase the efficiency of water and energy use. Research and development are one of the most important criteria for selecting joint social responsibility projects. Additionally, this project will also create job opportunities for Omanis to work in this field during the project's implementation, from research and development to establishing small and medium-sized enterprises.

The furnishing of the Early Intervention Association in Muscat project:

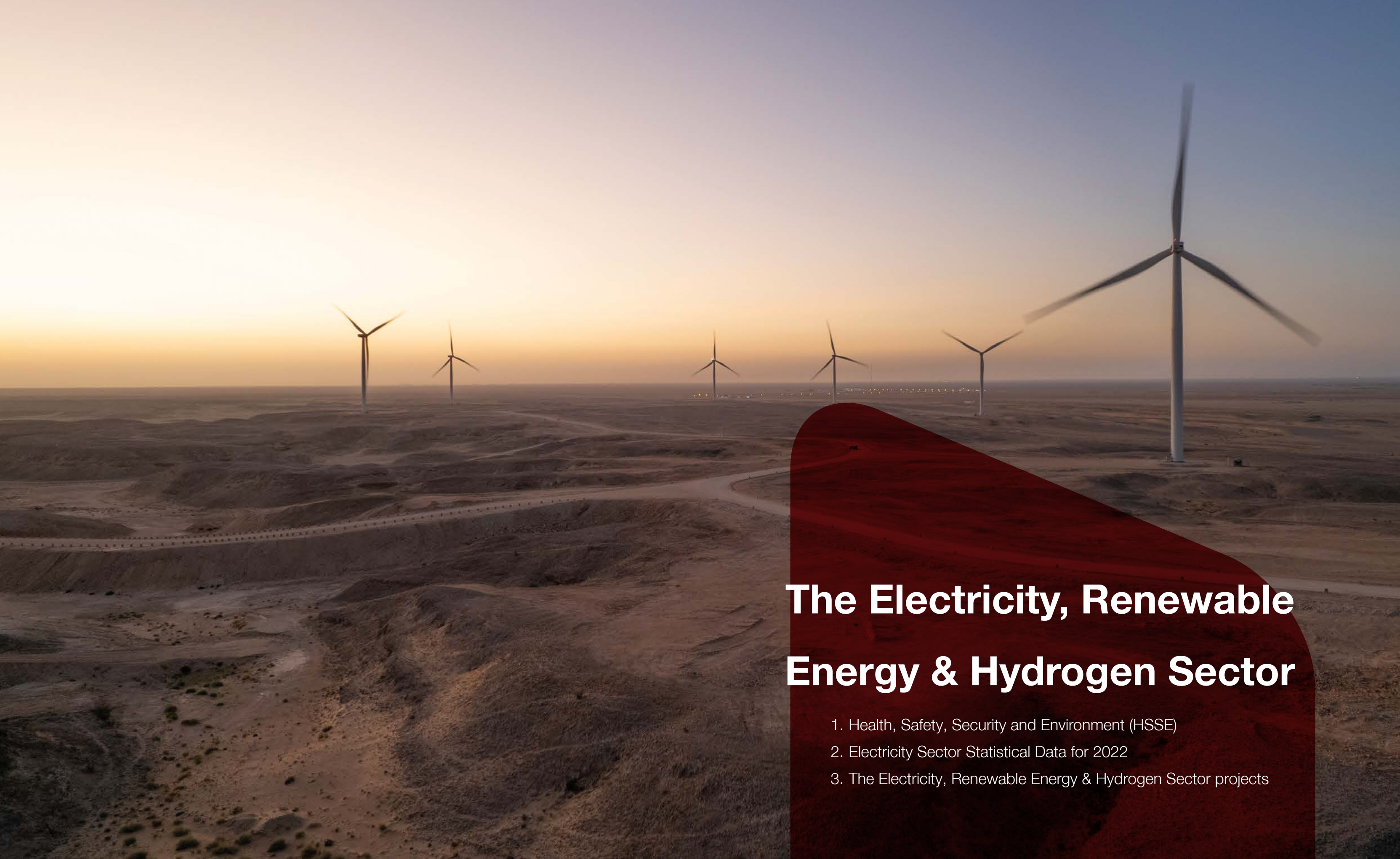
The aim of the project is to fully furnish the Early Intervention Association building and provide all necessary facilities and services required by the center, which was completed this year. It was designed to be a unique and comprehensive center that provides advanced services to various categories of people with special needs and their families.

■ Highlights on the role of oil and gas companies in the field of social responsibility

Companies have continued to contribute in the field of social responsibility by supporting many initiatives that meet the visions and aspirations of the Omani society. These initiatives are represented in several projects aimed at various fields.

A summary of the efforts of the major companies in 2022 can be found below:

	<ul style="list-style-type: none"> Establishing a healthcare centre in Mudday, Thumrait, to replace the current rental property. The centre will serve 40 patients daily, as the population of Mudday is approx. 2,846. Adding 10 classrooms and other facilities in Kabout school in Shaleem to provide separate facilities for male and female students and accommodate the increasing number of students. Creating a 1.6 km walkway in Hamra Al Drooa, Ibri that will serve 118 villages and 6,078 people in the area.
	<ul style="list-style-type: none"> Financed the establishment of Sur Public Park to preserve the environment's unique biodiversity and transform the coastal landscape. Funding the sponsorship of Oman Science Festival 2022 to enhance the educational experience in Oman. Signing a four-million-rials pact to support children with disability and capacity building among professional therapist working in this field. Financing the inauguration of Entrepreneurs Incubator at Sur Industrial City to support innovation and entrepreneurship. 000 Financing the fourth phase of developing concrete pavements and roads in villages in North and South Al Sharqiyah to ease the daily lives of people. Funding the establishment of Science, Technology, Engineering and Mathematics labs in different schools across South Sharqiyah Governorate
	<ul style="list-style-type: none"> Exclusive sponsorship of the .NXT GIG platform for .NXT Jadeer graduates and other freelancers to connect with companies and assist with identifying employment opportunities best suited for their expertise. Construction of a first-of-its-kind linear park in Al Maabilah, Muscat Governorate in collaboration and coordination with Muscat Municipality. Funding of medical and rehabilitation equipment for the Ehsaan Yanqul Disability Center which assists people in need across Al Dhahirah Governorate.
	<ul style="list-style-type: none"> "Mustadeem 4" programme: Providing 50 off-grid solar energy systems for the water pumps and green houses damaged from cyclone Shaheen. "Sharah" programme: Developing the skills of 40 unemployed with hearing impairment in three fields: Arabic language, English language and computer skills. "Mulhimat 4" programme: Supporting female entrepreneurs by providing guidance and training opportunities.
	<ul style="list-style-type: none"> Establishing of Diba Legacy Center The planting ten million trees initiative Supporting the establishment of an Engineering lab to develop the scientific skills of the faculty of Engineering's students at the Sultan Qaboos University.
	<ul style="list-style-type: none"> Supporting training courses by Outward Oman for 15–17-year-olds. The "We are with you" program- A campaign to support diabetic individuals by buying their needed equipment Proving the equipment needed for Al-Wafaa Center at Al Mudaybi
	<ul style="list-style-type: none"> A footpath, cycling course and outdoor gym in Ibri Supporting and establishing the "Space Corner" in the Children's Museum Enhancing and developing the main park in Hamra Al- Dorooa



The Electricity, Renewable Energy & Hydrogen Sector

1. Health, Safety, Security and Environment (HSSE)
2. Electricity Sector Statistical Data for 2022
3. The Electricity, Renewable Energy & Hydrogen Sector projects

1. Health, Safety, Security and Environment (HSSE)

HSSE in the electricity sector for 2021-2022



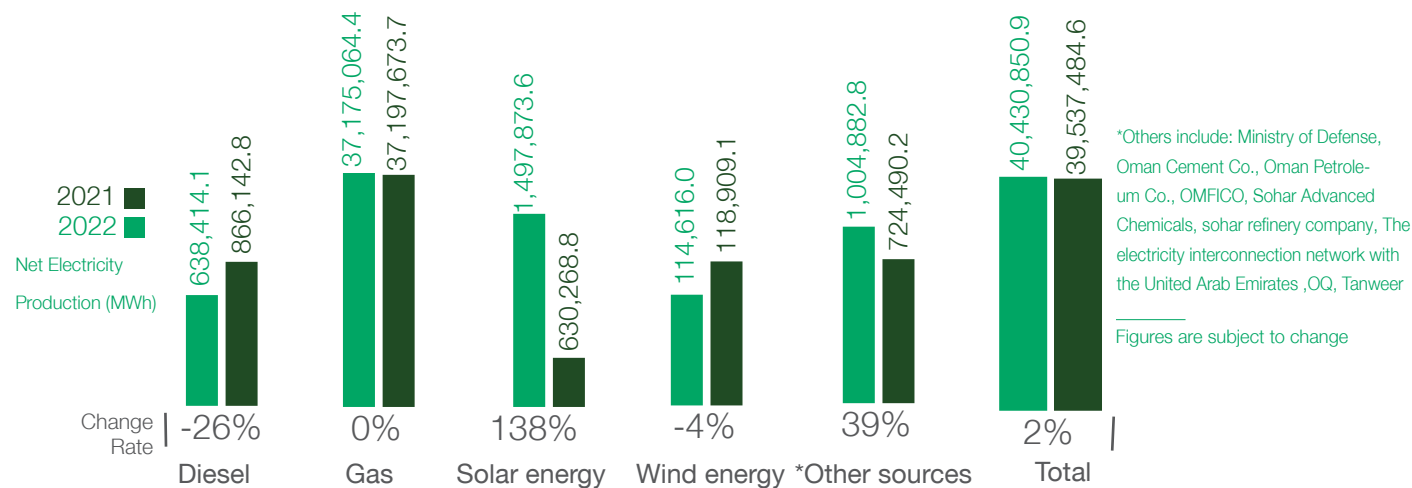
2. Statistical Data

The total electricity production in the year 2022 reached 41.8 TWh, with a net production of 40.4 TWh, an increase of 2% compared to the previous year. The net electricity produced from natural gas was 37.2 TWh, accounting for 92% of the total energy sources used for electricity production. Solar energy production continued to increase by 138% compared to 2021, with the continuation of the operation of the Ibri 2 plant of Shams Al Dahra Electricity Generating Company.

Gross production of electricity according to its sources 2022

Source	Gross Electricity Production MWh	%
Diesel	660,963.4	2%
Gas	38,488,005.2	92%
Solar energy	1,497,877.9	4%
Wind energy	114,616	0%
*Other sources	1,004,882.8	2%
Total	41,766,345.2	100%

Net production of electricity according to its sources 2021- 2022



3. Electricity, Renewable Energy and Hydrogen Sector Projects

Electricity and Renewable Energy Projects

The electricity linkage project between the north and south of Oman.

The electricity linkage project from the north to the south is a high-priority project due to its effective strategic role in serving the electricity sector and the economy. It will enhance the overall power system in Oman and connect the electricity networks in rural areas and the economic zone in Duqm with the electricity systems in the north and south of Oman. This will also pave the way for linking more renewable energy projects, particularly wind energy. The project, implemented by the Oman Electricity Transmission Company, consists of two phases.

1. The first phase of the electricity linkage project between the north and south

A significant portion of the first phase, connecting the north of Oman to Ad-Duqm. It is expected to be completed during this year, with the following key components:

- The construction of 400 kilovolt high-voltage transmission lines from Nihayda station to the Barik station and from the Barik station to the Sweihat station.
- The construction of 400 kilovolt high-voltage transmission lines from Sweihat station to Ad-Duqm station and from Ad-Duqm station to the Mahout station.
- The construction of two grid stations, Barik and Sweihat, with a voltage of 400/132 kilovolts.
- The construction of Ad-Duqm station with a voltage of 33/132/400 kilovolts and Mahout station with a voltage of 33/400 kilovolts.

2. The second phase of the electricity linkage project between the north and south.

The design work for the components of the second phase of the electricity linkage project between the north and south is currently underway. This phase extends from Ad-Duqm to the Dhofar Governorate, and it is expected to be completed by the end of the year 2026.

The project to connect Masirah Island to the main electricity grid.

The project to connect Masirah Island to the main electricity grid involved extending a 132-kilovolt overhead transmission line from Mahout station, which has a voltage of 400/132/33 kilovolts, to the mainland adjacent to the island, covering a distance of approximately 59 kilometers. The transmission line was then connected to an undersea cable to Masirah Island, covering a distance of approximately 33 kilometers, to connect the Masirah station with a voltage of 132/33 kilovolts.

The project, managed by the Oman Electricity Transmission Company, aims to develop the island, improve the efficiency and integration of the national electricity transmission network, reduce fossil fuel (diesel) consumption, which will result in reducing greenhouse gas emissions and reducing the cost of energy production.

The Spot Market Project

The actual operation of the Electricity Spot Market in Oman began in January 2022 with the aim of providing an alternative mechanism for purchasing electricity at the wholesale level, taking into account the variability in electricity generation and consumption in a flexible manner. The spot market operates in a different way to the current market, where the Oman Power and Water Procurement Company purchases electricity for short periods and at a price assigned to each half-hour of the trading period based on the demand of the sector and the offers of power generation stations.

Direct Sale Regulatory Framework

The establishment of a legal and regulatory framework for the direct sale of electricity will allow power generation companies to sell excess electricity directly to customers who meet certain criteria. The project will be implemented in phases, with continuous evaluation to ensure economic viability and compliance with regulatory and technical requirements.

In the first phase, the direct sale will be limited to qualified customers, typically large producers and consumers, including power plants with expired contracts and current industrial consumers who have self-generating facilities. The transition to subsequent phases will be looked into at the appropriate time.

The technical aspects of the direct sale framework must be taken into account to ensure compliance with all economic and technical requirements, such as grid connection, electricity transmission effects, consumption calculation, and settlement. It is also necessary to understand price index movements based on supply and demand during the various stages of implementing direct sales.

The direct sale framework will be aligned with the Electricity Spot Market mechanism to provide safeguards against potential fluctuations in spot market prices. The regulatory framework for direct sales will ensure system security and cover all associated costs, including electricity transmission costs.

It is expected that the legal framework for direct sales will contribute to achieving the benefits of other projects and initiatives, such as those related to green hydrogen.

Manah Solar Power Plants

In line with the shift towards renewable energy and the utilization of national capabilities in renewable energy sources, tenders were awarded earlier this year for the development of two Manah Solar Power Plants with a combined capacity of 1,000 megawatts, through the Oman Power and Water Procurement Company.

Initial studies for the project began in the first quarter of 2019, and the pre-qualification phase was completed in December 2019, with the tender documents being issued in January 2020. The project agreements were signed at the beginning of this year, and it is expected to significantly contribute to enhancing the energy mix and reducing reliance on natural gas for electricity generation.

Manah Solar Power Plants project demonstrates Oman's commitment to diversifying its energy sources and reducing its carbon footprint while utilizing its natural resources. The project is expected to create jobs and stimulate economic growth while providing clean and sustainable energy to meet the country's growing demand for electricity.

Wind Energy Projects

In addition to the diversification initiative, and in line with the shift towards renewable energy and the development of current energy sources in the sector, the Oman Power and Water Procurement Company is planning to establish wind power plants for electricity generation.

The company is currently conducting an economic feasibility study for these projects, with a detailed assessment of wind energy resources at the national level to support the development of future wind projects in Oman. Wind monitoring devices have been installed in two locations, one in Duqm and the other in Jalan Bani Bu Ali, and based on the results of these measurements, a decision will be made regarding the implementation of wind energy projects.

This initiative is part of Oman's efforts to reduce its reliance on fossil fuels and increase its use of renewable energy sources. Wind energy has the potential to provide a significant amount of clean and sustainable energy, contributing to the country's economic and environmental sustainability.

Advanced Metering Infrastructure (AMI) Project

Electricity distribution companies in Oman are implementing the Advanced Metering Infrastructure (AMI) project for all subscribers in the country, in order to transition to automated meter reading for all electricity meters and improve the energy consumption system. The project aims to leverage the massive data that will be provided by the smart meter system to enhance and develop customer services, network planning and maintenance, emergency management, asset management, and investment efficiency, as well as achieve operational efficiency.

AMI project is an important step towards improving the efficiency and reliability of the electricity distribution system in Oman, as well as reducing energy consumption and costs. It will enable electricity companies to have real-time access to consumption data and provide customers with more accurate and timely billing, while also allowing them to monitor and manage their energy consumption more effectively. The project will also contribute to Oman's efforts to promote sustainable development and reduce its carbon footprint.

Barka Waste-to-Energy Plant Project

Barka Waste-to-Energy Plant project is the first of its kind in Oman, and it began as an idea in 2016 when the Oman Environmental Services Holding Company (Be'ah) conducted a feasibility study as part of its long-term strategic plan to develop the waste sector in Oman. The project was also in line with the government's efforts to reduce reliance on landfilling and diversify sources of electricity production, as well as reduce greenhouse gas emissions and preserve the environment.

Oman Power and Water Procurement Company, in collaboration with Be'ah, completed the technical and economic feasibility study to establish a power generation plant using waste as a fuel source, and the financial burden of the project was re-evaluated in 2021 based on the study's results and accordingly the Public Services Regulatory Authority recommended the project be continued. Oman Power and Water Procurement Company, in collaboration with Be'ah, is committed to developing the project further, given its economic and environmental benefits.

Barka Waste-to-Energy Plant project will help Oman to reduce its carbon footprint and contribute to the country's sustainable development. It will also provide a reliable and sustainable source of electricity, reduce the amount of waste sent to landfills, and create job opportunities in the waste management and renewable energy sectors.



Amin Solar Energy Project

- Established: 2020
- Production Capacity: 100 MW
- Location: Al Wusta – Nemr
- Offtaker: Petroleum Development Oman
- Developer: Amin Renewable Energy
- Land Area: 4 Km²
- Project Cost: 94 million USD
- CO² Offset: 225 thousand tons/year



Qabas Solar Plant

- Established: 2021
- Production Capacity: 25 MW
- Location: Al Batinah – Sohar
- Offtaker: Al Tamman Ferrochrome
- Developer: Qabas Solar Energy (Shell Oman)
- Land Area: 0.5 Km²
- CO² Offset: 25 thousand tons/year



Ibri 2 solar power plant

- Established: 2022
- Production Capacity: 500 MW
- Location: Ad Dhahirah – Ibri
- Offtaker: The Oman Power and Water Procurement Company (OPWP)
- Developer: Shams AL-Dhahra, ACWA Power
- Land Area: 13.27 Km²
- Project Cost: 417 million USD
- CO² Offset: 340000 Tons/Annum

Green Hydrogen Projects



Oman is blessed with extremely competitive resources such as solar and wind energy, and its location provides access to some of the world's most important energy corridors. Oman has also been classified as one of the leading hubs in the world for producing green hydrogen and ammonia.



The government is currently working on developing policies, regulations, and administrative structures to allocate land for renewable energy projects.



Hydrogen Oman (Hydrom), in collaboration with the Ministry of Energy and Minerals, has recently announced the allocation of two land plots for investment in the green hydrogen sector as a first step towards achieving Oman's goal of producing one million tons of green hydrogen annually by 2030. The projects will be awarded at the beginning of the second quarter of 2023.



An aerial photograph of a mining site. A yellow conveyor belt system runs diagonally across the frame, transporting material from a processing area at the top right towards large, conical piles of light-colored gravel or crushed stone in the foreground. The background shows a dry, hilly landscape with sparse vegetation.

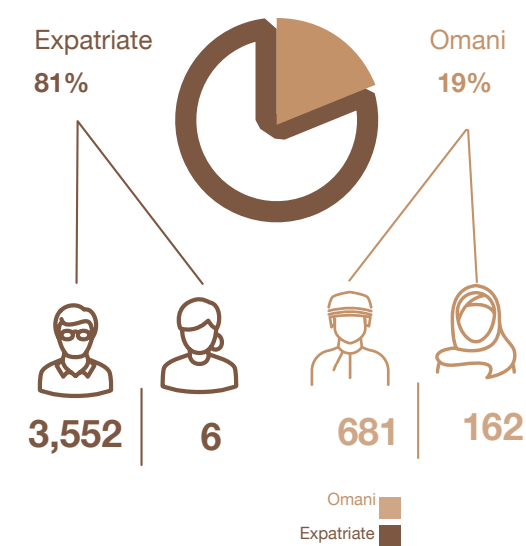
Minerals Sector

1. Omanisation
2. Production Quantity
3. Sales Quantity
4. Sales Value
5. Mineral Ores Exports
6. Licensing System
7. Mining projects
8. The role of mining sector in Corporate Social Responsibility(CSR)

1. Omanisation

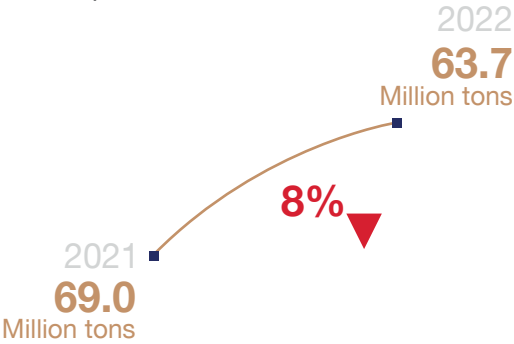
The number of Omani employees in Mining Companies during 2022 was about 843 (male and female employees) out of 4,401 (male and female employees), i.e. about 19%.

Total Workforce in Mining Activities for 2022



2. Production Quantity

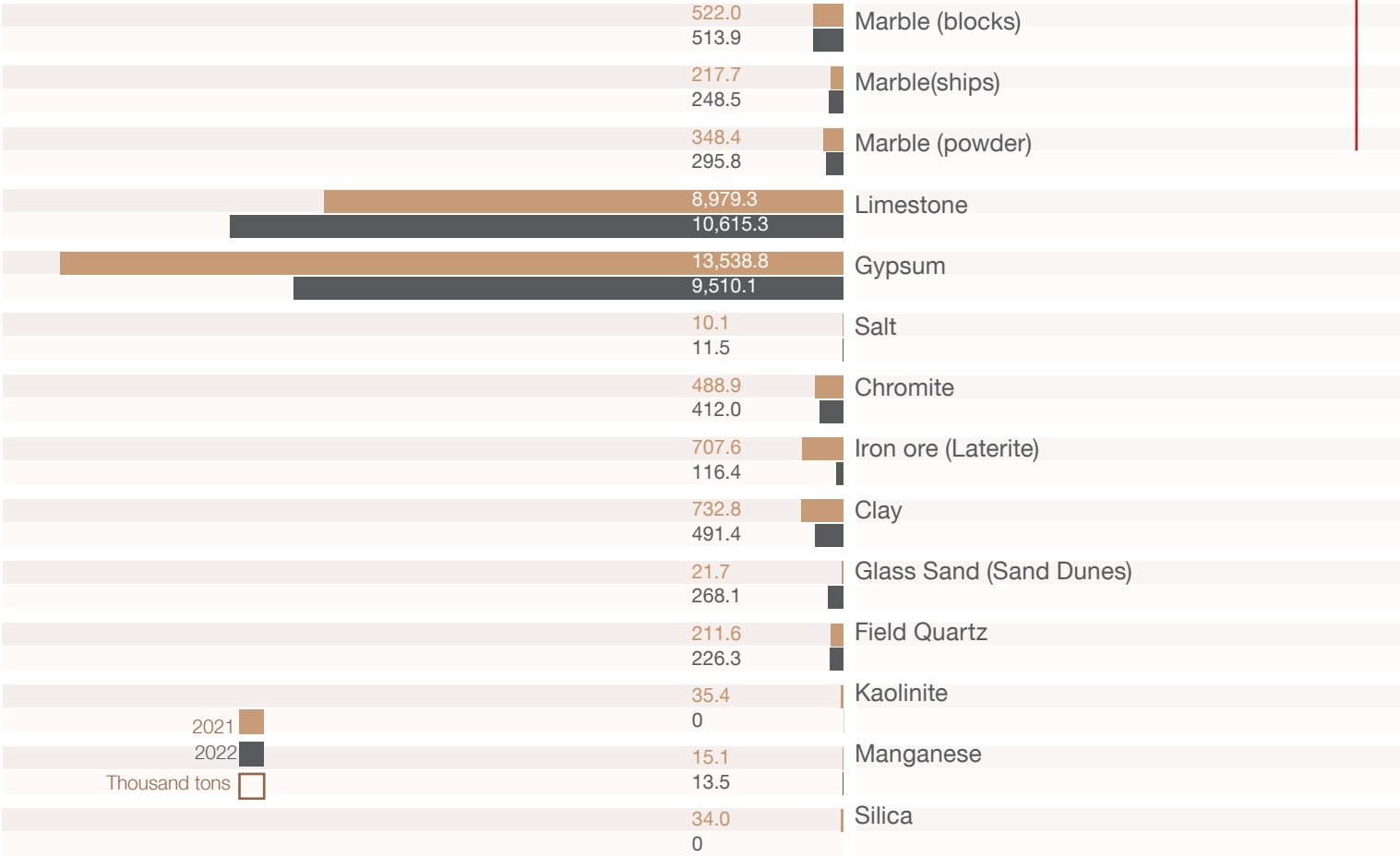
During 2022, the total production of mineral ores amounted to approximately 63.7 million tons, indicating an 8% decrease compared to 2021; there was a decrease in production amount of Gypsum and Building material by 6 million, which constitute 79% of the total production. These declines are due to the lack of demand upon some materials, in addition to the delay of the mining companies’ submission of their monthly production reports.



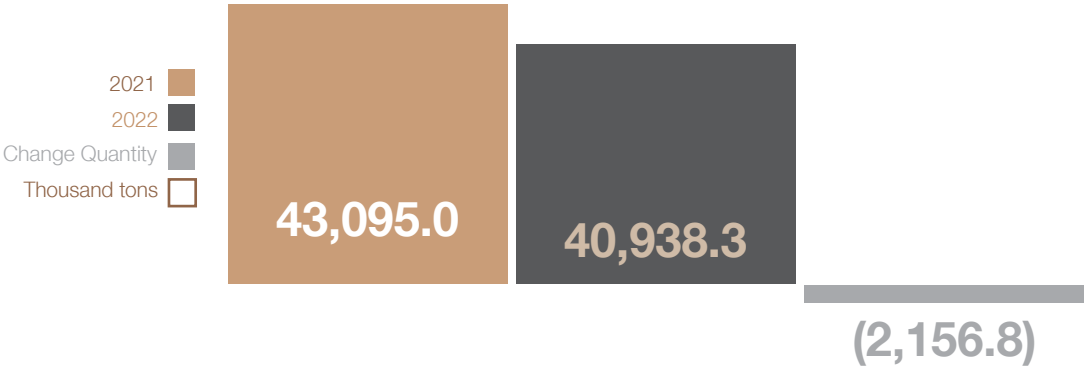
Production amounts of mineral ores 2021-2022

Mineral	Production Quantity (thousand tons)	
	2021	2022
Marble (blocks)	522.0	513.9
Marble (ships)	217.7	248.5
Marble (powder)	348.4	295.8
Limestone	8,979.3	10,615.3
Gypsum	13,538.8	9,510.1
Salt	10.1	11.5
Chromite	488.9	412.0
Iron ore (Laterite)	707.6	116.4
Clay	732.8	491.4
Glass Sand (Sand Dunes)	21.7	268.1
Field Quartz	211.6	226.3
Kaolinite	35.4	0
Manganese	15.1	13.5
Silica	34.0	0
Building Materials	43,095.0	40,938.3
Total	68,958.5	63,661.2

Quantities of Mineral Ores Production for 2021-2022

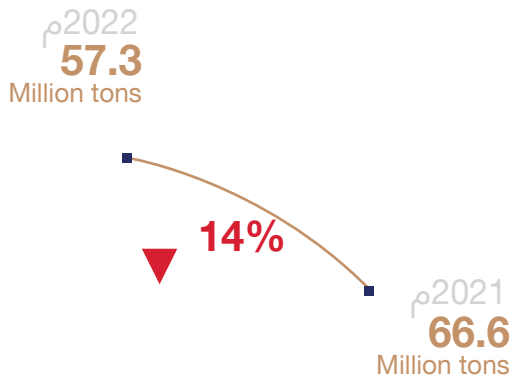


Production amount of mineral ores 2021-2022



3. Sales Quantity

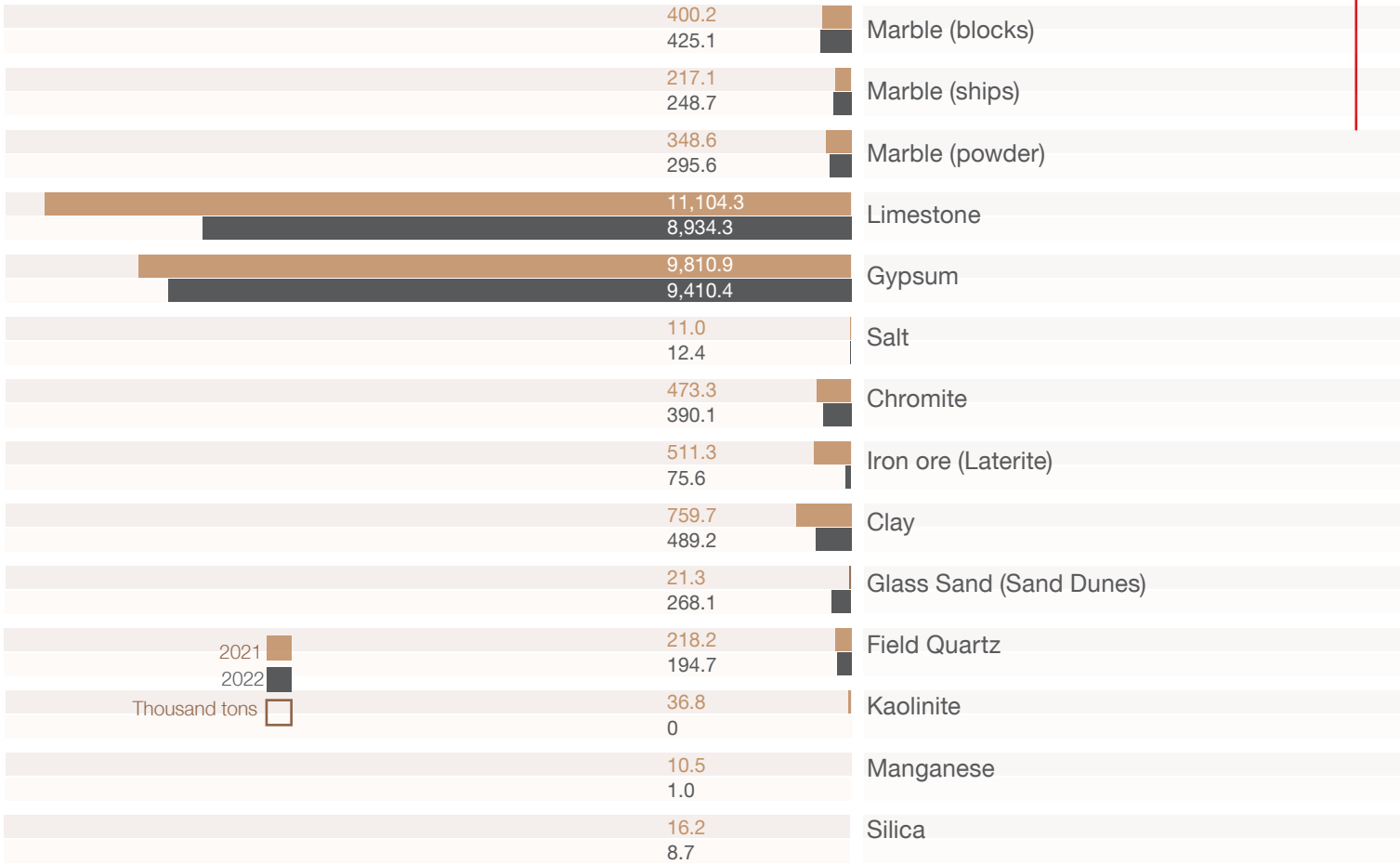
In the current year, the total amount of mineral ores sold amounted to approximately 57.3 million tons, representing a decrease of 14% compared to the previous year, as the sales of Limestone, Gypsum and Building materials decreased by 8.7 million tons. These declines are due to the lack of demand upon some materials, in addition to the delay of the mining companies’ submission of their monthly production reports.



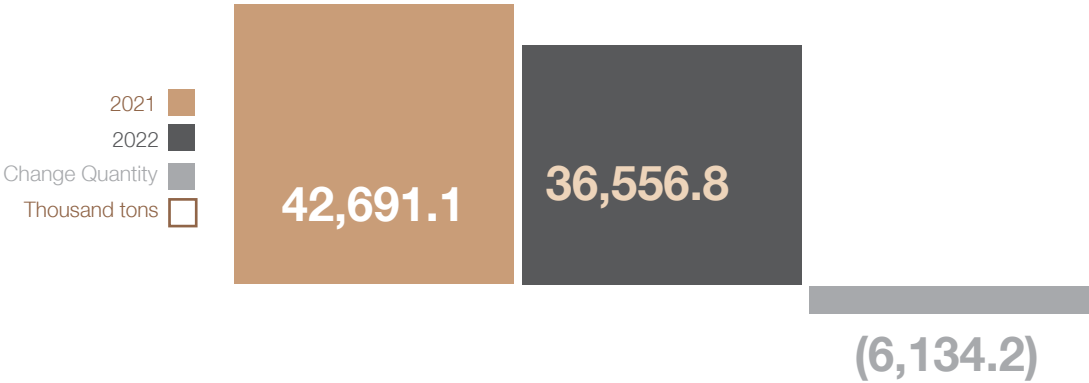
Quantities of Mineral Ores Sold for 2021 - 2022

Metal	Sales Quantity (thousand tons)	
	2021	2022
Marble (blocks)	400.2	425.1
Marble (ships)	217.1	248.7
Marble (powder)	348.6	295.6
Limestone	11,104.3	8,934.3
Gypsum	9,810.9	9,410.4
Salt	11.0	12.4
Chromite	473.3	390.1
Iron ore (Laterite)	511.3	75.6
Clay	759.7	489.2
Glass Sand (Sand Dunes)	21.3	268.1
Field Quartz	218.2	194.7
Kaolinite	36.8	0
Manganese	10.5	1.0
Silica	16.2	8.7
Building Materials	42,691.1	36,556.8
Total	66,630.5	57,310.7

Quantities of Mineral Ores Sold for 2021 - 2022

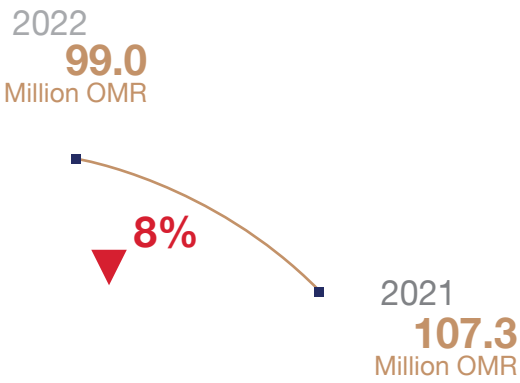


Quantities of Building Materials Sold for 2021-2022



■ 4. Sales value

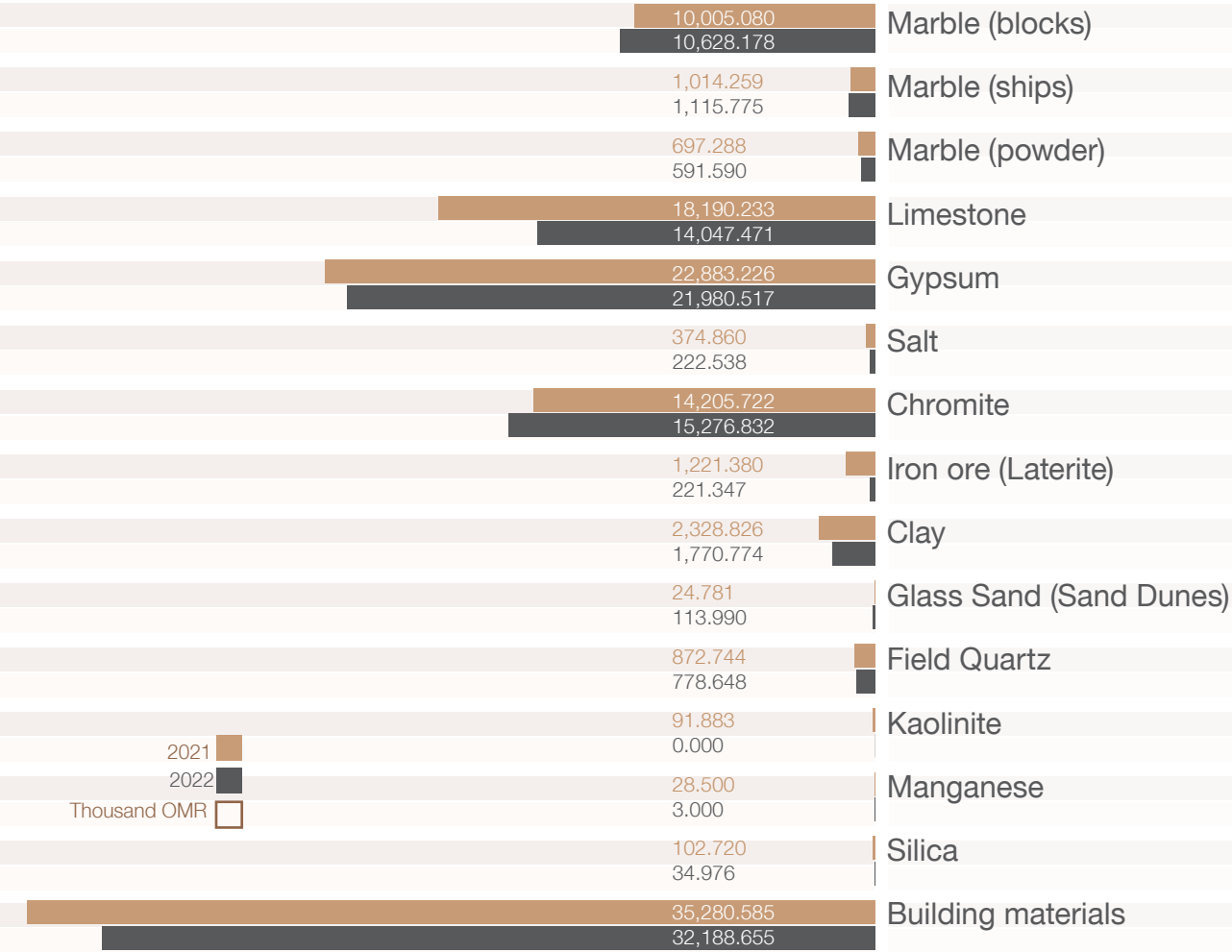
During 2022,, the sales value of mineral ores amounted to almost 99 million Omani riyals, reflecting an 8% decrease compared to the previous year. This decrease can be attributed to the reduction in sales of limestone ores, gypsum, and building materials, which make up the largest percentage of the total sales value. Conversely, the sales value of chrome increased by one million Omani riyals compared to last year.



Sales value of mineral ores 2021-2022

Mineral	Sales Value (Thousand OMR)	
	2021	2022
Marble (blocks)	10,005.080	10,628.178
Marble (ships)	1,014.259	1,115.775
Marble (powder)	697.288	591.590
Limestone	18,190.233	14,047.471
Gypsum	22,883.226	21,980.517
Salt	374.860	222.538
Chromite	14,205.722	15,276.832
Iron ore (Laterite)	1,221.380	221.347
Clay	2,328.826	1,770.774
Glass Sand (Sand Dunes)	24.781	113.990
Field Quartz	872.744	778.648
Kaolinite	91.883	0.000
Manganese	28.500	3.000
Silica	102.720	34.976
Building Materials	35,280.585	32,188.655
Total	107,322.086	98,974.290

Sales value of mineral ores 2021-2022



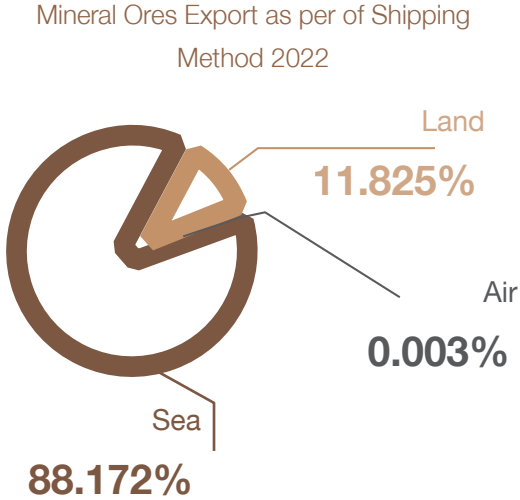
5.Mineral Ores Exports

The total exports of mineral raw materials from the Sultanate amounted to approximately 36.5 million tons, indicating a 2% decrease compared to 2021. The decrease can be attributed to the 3 million ton decline in building material exports, which constitute 54% of the total exports of mineral ores.. However, there was a 2 million ton increase in exports of gypsum and dolomite ore compared to 2021

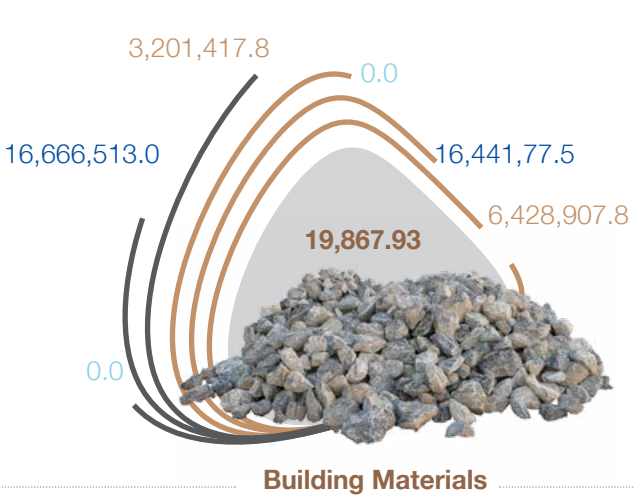
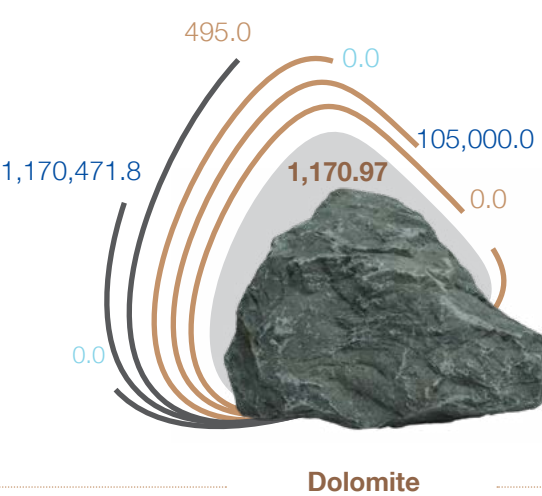
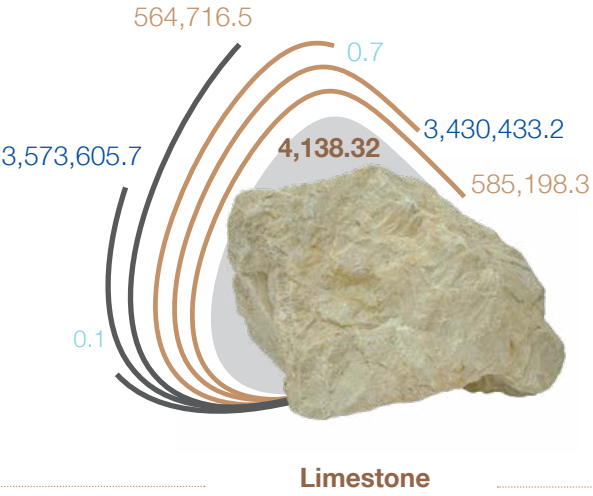
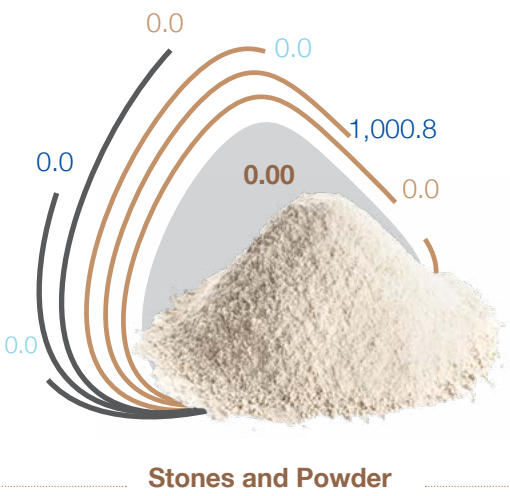
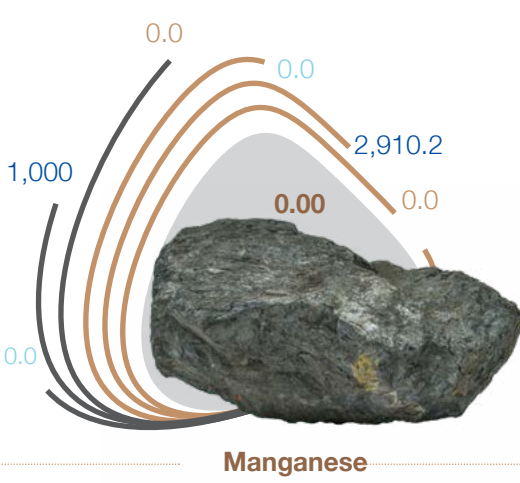
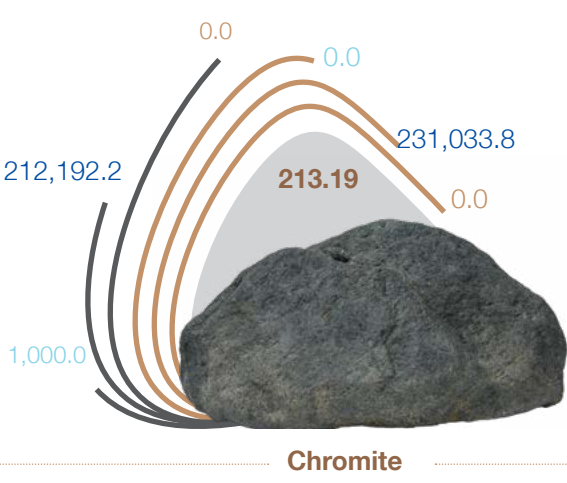
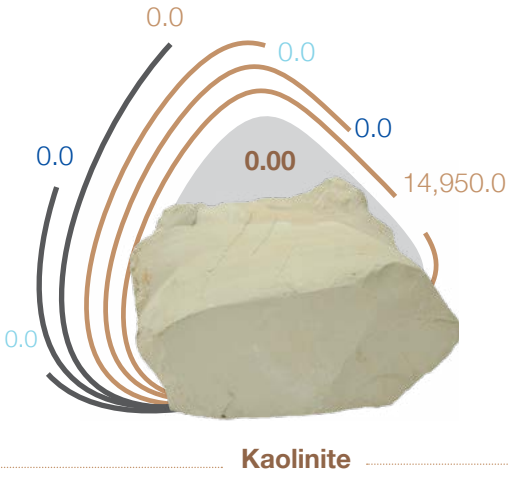
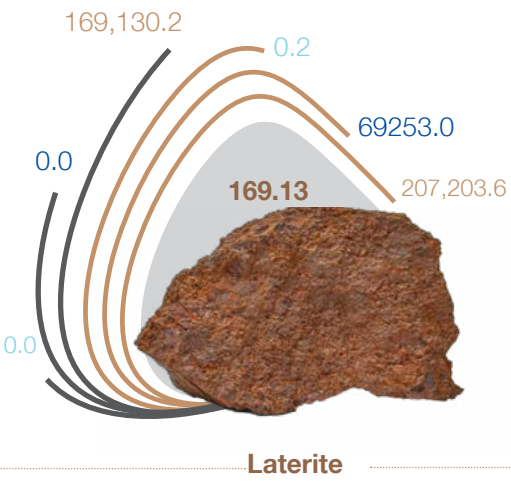
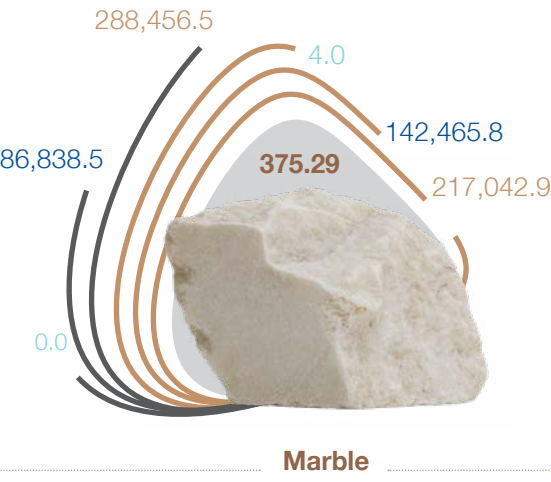
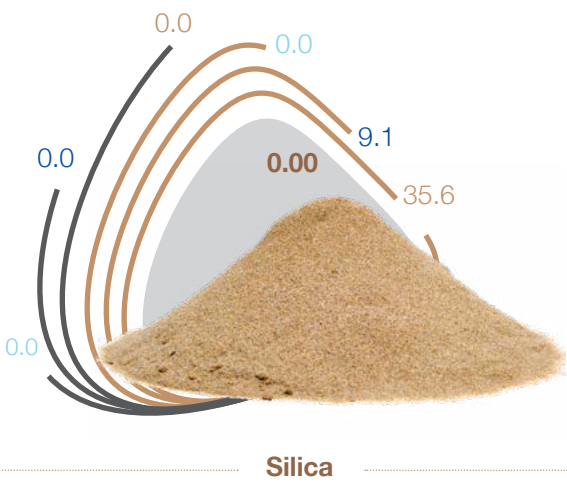
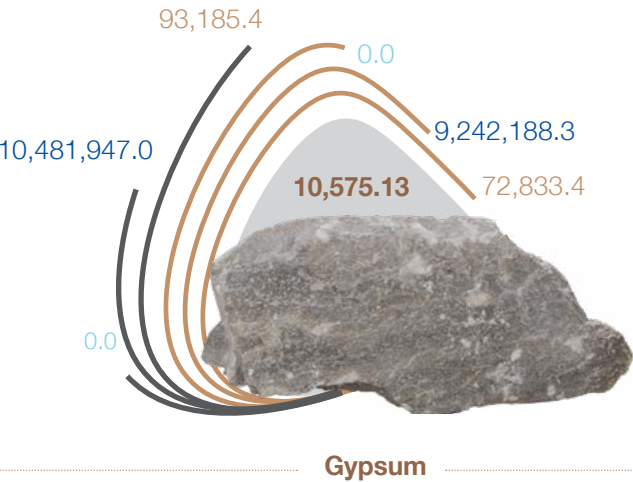
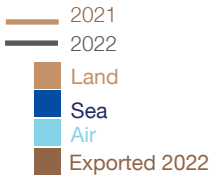
Quantity of Mineral Ores Exported for 2021-2022

Mineral	Quantity of Mineral Ores Exported (tons)					
	2021			2022		
	Land	Sea	Air	Land	Sea	Air
Building Materials	6,428,907.8	16,441,777.5	0.0	3,201,417.8	16,666,513.0	0.0
Gypsum	72,833.4	9,242,188.3	0.0	93,185.4	10,481,947.0	0.0
Iron (Laterite)	207,203.6	69,253.0	0.2	169,130.2	0.0	0.0
Kaolinite	14,950.0	0.0	0.0	0.0	0.0	0.0
Stones and Powder	0.0	1,000.8	0.0	0.0	0.0	0.0
Limestone	585,198.3	3,430,433.2	0.7	564,716.5	3,573,605.7	0.1
Silica	35.6	9.1	0.0	0.0	0.0	0.0
Marble	217,042.9	142,465.8	4.0	288,456.5	86,838.5	0.0
Chromite	0.0	231,033.8	0.0	0.0	212,192.2	1,000.0
Manganese	0.0	2,910.2	0.0	0.0	1,000	0.0
Dolomite	0.0	105,000.0	0.0	495.0	1,170,471.8	0.0
Total	7,526,171.5	29,666,071.5	4.9	4,317,401.4	32,192,568.1	1,000.1
Grand Total	37,192,247.8			36,510,969.6		

Mineral	Quantity of Mineral Ores Exported 2022 (tons)
Building Materials	19,867.93
Gypsum	10,575.13
Iron (Laterite)	169.13
Kaolinite	0.00
Stones and Powder	0.00
Limestone	4,138.32
Silica	0.00
Marble	375.29
Chromite	213.19
Manganese	0.00
Dolomite	1,170.97
Total	36,510.97



Mineral Ores Exported 2022



6. Licensing System

Number of Permanent Mining and Exploration Licenses for 2022



Permanent Mining Licenses

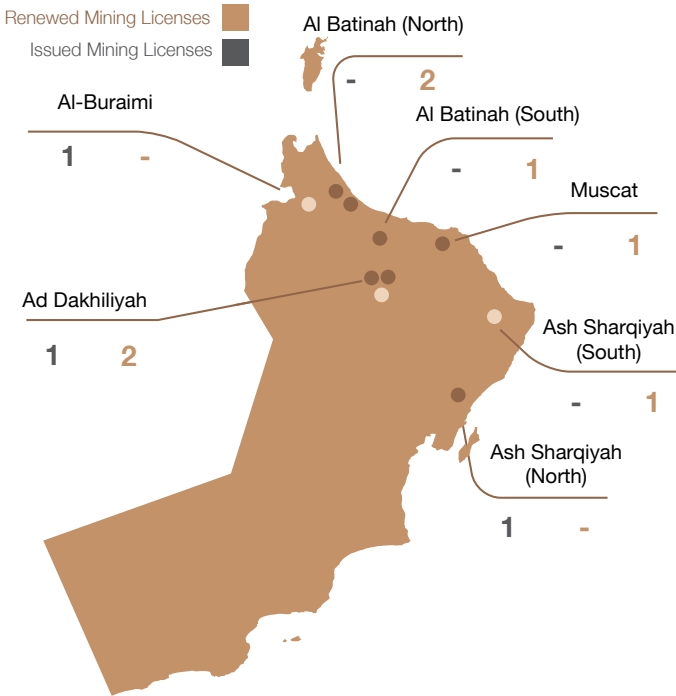
3 issued licenses
7 renewed licenses

Exploration Licenses

18 issued licenses
21 renewed licenses

6.1 Mining Licenses

Number of Mining Permanent Licenses issued in 2022 based on governorates



6.2 Exploration Licenses

Number of Exploration Licenses as Per the Mineral Ores for 2022

Renewed Exploration Licenses	material	Exploration Licenses Issued
1	Marble	3
8	Chromite	4
2	Limestone	2
5	Gypsum	5
1	Manganese	-
2	Kaolinite	-
2	Copper	-
-	Building Materials	2
-	Decorative stones	2
21	Total	18



7.The Most Important Projects in the Mineral Sector

The project of preparing public sites related to marble and building materials for bidding

The main objective of the project is to create competitive investment opportunities for marble and building materials through a transparent and fair bidding system. The project aims to achieve financial and technical efficiency while promoting the principles of transparency and equality.

Exploration and Mining Project for Copper and Gold Ore for Block 10 in Yanqul

The project is being undertaken by Mazoon Mining LLC, an Omani joint venture established in April 2018 to develop Block 10 in Yanqul for the extraction of copper and gold ore. The exploration work has resulted in the discovery of five commercial sites (Bishara, Hail Al Safi, Al Jadeed, Al Raki, and Asghar). The project aims to extract copper and gold.

Al Washihi Copper Ore Mining Project

The aim of this project is to develop the copper mine in Al-Mudhaibi and extract copper ore for the production of concentrated copper. Copper concentrate with a degree of 24% copper per ton will be produced, and the estimated monitored quantity of copper ore is around 16 million tons.

Mining and Minerals Innovation Project

The objective of the project is to evaluate the various stages and processes involved in mining and mineral production, from testing the raw materials to producing the final product. The project aims to enhance the value and quality of the Mining and minerals sector by applying innovative tools and techniques to increase the value-added.

Shalim Mining Development Project

In its early stages of exploration, the project is focused on the mining of gypsum, limestone, and dolomite ores for export to the global market.

There are indicators of the availability of ores in large quantities and high purity.

The mining area is located in Shalim and Al Hallaniyyat Islands in the Dhofar Governorate, as well as Al Jazer in the Al Wusta Governorate. The specified area covers 3314 square kilometers and is located 350 kilometers away from Duqm.

Ghuzayn Copper Ore Mining and Condensation Project

This vital and value-added project aims to extract approximately 6 million tons of 2% copper ore over a period of six and a half years

Dolomite Economic Feasibility Study Project

The project aims to produce up to 3 million tons per year of dolomite ore.

After the feasibility has been proven, high-grade dolomite will be utilized to produce magnesium. Low-grade dolomite and aggregate containing less than 1% silica will be used for the iron industry.

The scoping study suggests that the volume of resources present in the region could reach more than 250 million tons of dolomite ore.

Salt Purity Project

The project aims to produce high-quality, pure salt for industrial use at both the upper and lower levels.

Since 2006, this project has been one of the strategic government projects that has received significant attention through “Oman Oil Company” and “Takamul Company”. Currently, “Minerals Development Oman” and “Shumookh Investment and Services Company” are collaborating to produce one of the most important raw materials of our time due to its high demand in the regional and global market.

Furthermore, pure salt has a broad range of industrial uses in many manufacturing industries.

■ 8.The role of the Mining Sector in the Field of Social Responsibility

The mining sector plays a significant role in serving the local community, particularly in the mining areas affected by related activities. As part of this role, 1% of mining site sales are allocated for community service through the offices of governors in the respective governorates.

The Ministry of Energy and Minerals is continuing its efforts to develop a mechanism for calculating amounts due and penalties for arrears, as well as managing disbursement in an orderly manner. As part of this effort, the ministry has prepared an executive regulation for the management of disbursement of amounts due for social responsibility from the mining sector. Such draft is in the process of final review with the relevant parties and is expected to be completed and applied from the first quarter of 2023.



**Overview of Top Oil
and Gas Companies**



شركة تنمية نفط عُمان

Petroleum Development Oman

PDO Purpose

“Building a sustainable and low-carbon future to maximise value for Oman.”

Introduction

2022 marked the 85th anniversary since our inception and the 55th anniversary since the first export of oil from Mina Al Fahal.

In a milestone year, we bounced back from the COVID-19 pandemic, by significantly boosting our contribution to the nation's revenue while lowering our production costs and GHG emissions.

After an extensive stakeholder engagement programme, we have developed a new purpose and strategy for PDO, which have been approved by our Board. These will enable us to sustain and grow our core business in the face of mounting climate change realities whilst ensuring energy security, affordability and sustainability.

The changes will ensure we continue to deliver and grow oil and gas in ever more sustainable ways and also play our part in building a new energy system for Oman. This includes investment to become a net-zero business by 2050 in-line with the country's NZE2050 orderly transition.

To achieve our aims, we are also instituting a new operating model, bringing improvements in our processes, structure and people performance, thereby optimising the resources at our disposal and empowering our people.

Throughout, we remained committed to excellence by creating value across all aspects of our business, while also meeting, and in some cases surpassing, a range of targets to proudly serve Oman.

In 2022, PDO:



Delivered a combined oil, gas and condensate production of 1.17 million boepd with 715 new wells drilled



Booked 126 million barrels of Contingent Resource (CR) oil and 0.34 trillion cubic feet (Tcf) of non-associated gas as CR volumes



Achieved a record Omanisation staff ratio of 90%



Halved our number of Tier-1 and Tier-2 process safety incidents



Recorded significant reductions in greenhouse gas (GHG) emissions, flaring and oil spills



Continued to support communities and job creation through our In-Country Value (ICV) programme.

Production

As the country's largest hydrocarbon producer, we continued our role as the country's swing producer for gas, requiring us to operate in a highly dynamic mode.

PDO average oil production for 2022 was 660,894 barrels per day (bpd), which was 8,894 bpd higher than the planned target due to improved new oil performance and scheduled activities.

Condensate output was 100,172 bpd, while gas production was 56 million m³/d, consistent with lower customer demand.

The combined total average barrel of oil equivalent production per day (oil, condensate and gas) was 1.17 million boepd. The coming years will see continued production growth, in line with our production ambition of more than 700,000 bpd.

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.

Sadly, our 2022 performance fell well short of our aspirations. There were five PDO/contractor and three third-party work-related fatalities. Our Total Recordable Case Frequency rose from 0.69 per million manhours worked in 2021 to 0.79, and. The Lost Time Injury Frequency also rose from 0.21 to 0.22 per million manhours worked, although the number of manhours also increased 9% from 180.8 million to 197.1 million.

To address such a concerning pattern, we are implementing a major Safety Refresh initiative focusing on six priority areas: Road Safety, Safety Leadership, Being a Learning Organisation, Risk Management, Contractor HSE Management and Process Safety.

We have also instituted a three-phased urgent response to personal safety issues, with Phase 1 focusing on the deployment of internal resources from the headquarters to Interior locations to support site teams with the main objective of having additional site supervision and immediate interventions, where needed. Phase 2 was kicked off to review PDO's staff capability and capacity in managing the operations safely, while Phase 3 will be looking into End-to-End resources strategy and ways of implementation to ensure PDO reaches and sustains the desired safety status.

Additionally, we are also making excellent progress on contractor HSE, relaunching the PDO-CEO HSE Forum, bringing together company and contractor leaders to collaboratively define and drive the HSE improvement plan. Furthermore, over 300 safety leadership activities, including site visits, were conducted jointly by the PDO leadership team and contractor CEOs.

On the environmental front, the number of spills per million tonnes of oil production fell 81% to 0.09, with a near 96% reduction in the quantity of oil spilled compared to 2021. Our GHG intensity dropped 9% to 0.179, with a 0.1 million tonne reduction in carbon dioxide emissions. We flared 8% less than the previous year, achieving a reduction of around 131,000 tonnes CO₂e.

There has been a heightened awareness about AI-PSM across the board through leadership prioritisation and numerous campaigns. This contributed to an improved process safety performance, with one Tier-1 incident (two in 2021) and 11 Tier-2 (22 in 2021).

Cost Competitiveness

We further enhanced our rigorous cost competitiveness regime in the light of inflationary pressures due to a variety of factors, including the Russia-Ukraine conflict, the post-COVID recovery in business activities and ongoing supply chain issues.

Our 2022 capital expenditure (Capex) was US\$5 billion, while operating expenditure (Opex) remained stable at US\$1.9 billion. We achieved more than US\$670 million in total cumulative savings against the budget, an increase in savings of more than 21% from 2021.

There were oil Capex savings of US\$632 million, which came from a mix of our Near-Term Sustainability programme revisions, drilling efficiencies, well optimisation and project savings, and gas Capex savings of US\$38 million.

We are placing more focus on operational cost competitiveness, aiming to sustain our current top-quartile unit operating cost of US\$6 per boe through to 2030.

Exploration

Our strong delivery focus helped deliver another very successful year with oil and gas bookings made from various plays from the core, such as Shuaiba and Gharif. A total of 126 million barrels of oil and 0.34 Tcf of non-associated gas were booked as CR volumes in 2022. The overall (oil and gas) unit finding cost was near US\$1.34 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.

New seismic techniques were deployed to identify new hydrocarbon accumulations, with the potential to unlock up to 10 billion cubic metres of additional contingent gas reserves in the Mabrouk field.

Well Engineering

Our Well Engineering Directorate delivered 715 wells, a 4.5% increase on the 2021 total of 684.

It also carried out more than 4,700 hoist well and reservoir management and 22,000 completion and well intervention activities, marking the largest number ever recorded in one year. This was achieved without additional resources.

We also reduced overall Non-Productive-Time (NPT) in our activities from 4.8% in 2021 to 3.5% in 2022, the lowest ever overall NPT recorded.

We ended the year with 70% of our wells being rated in the top quartile compared to our competitors.



New Technology

In 2022, we undertook a record number of technology trials and deployments. A total of 21 game-changing technologies were initiated to address our pressing corporate technical challenges, such as GHGs, flaring, energy efficiency and intensity, renewables and power generation.

A record number of 14 technologies were deployed after successful trials, providing solutions in areas such as HSE, energy management, artificial lifting and well construction.

We also continued our support to develop local academia by nurturing the Ejaad research and development platform to assist the sector. Five joint academia-industry research and development projects were awarded to different Omani universities and three others were concluded.

Lean/Business Efficiency

We strengthened our Lean and Continuous Improvement (CI) programmes to bring greater efficiency across the entire organisation and beyond.

A total of 9,000 new CI ideas have been generated and more than 300 projects completed, leading to US\$150 million in cost savings and avoidance and freeing the equivalent of 50 full-time staff to do more value-added tasks.

We have now also supported 19 government entities on their own Lean journeys and helped streamline more than 100 public services and processes.

Staff And Omanisation

At the end of 2022, the Company employed 8,904 employees. A total of 85.4% were male and 14.6% female (1,308), of which 7.3% (95) were Interior-based Omani women, testament to how we are trying to boost female numbers in the field. One in 10 of our staff were non-Omanis drawn from 60 nationalities. The remaining 90% were Omanis from all 11 governorates – a new Omanisation record for PDO. A total of 462 nationals were hired in the year and the total number of Omani graduates was 167.

In-Country Value (ICV)

To boost national employment and economic diversification, we helped deliver almost 2,900 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 realised six more ICV opportunities amounting to US\$30 million in 2022, taking the total number to 86 since 2013. These included the local manufacture of direct current cables and gratings, the repair and maintenance of power generators, and the provision of mud plant, park and ride and surveillance drone services.

We have also operationalised 76 ICV facilities, factories and workshops in nine years.

A key milestone was realised through a 10-year contract with KCA Deutag Energy to provide drilling services with four new highly automated rigs that will be built for the first time in Oman.

Social Investment (SI)

Our focus was on four social investment themes: community welfare, HSE, youth and female empowerment and education and science in line with the Oman Vision 2040 and the United Nations' Sustainable Development Goals (SDGs).

We committed to 82 new SI projects, totalling some US\$12.4 million, including donations and sponsorship projects. We also funded three joint ventures with other operators through the Ministry of Energy and Minerals' Corporate Social Responsibility initiative.

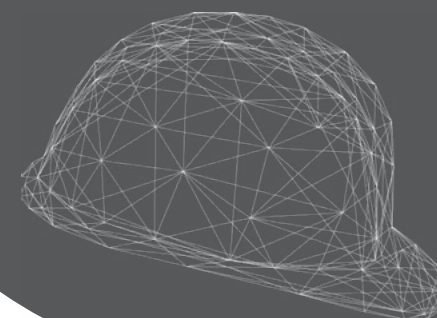
A total of 66 SI projects were completed, including vocational training centres at Al Mudhaibi, Salalah, Rustaq and Nizwa, which were handed over to the Ministry of Social Development.



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

Oman LNG

It is a limited liability company that was established in 1994 by a Royal Decree and is registered under the laws of the Sultanate of Oman. It primarily focuses on liquefying and selling natural gas and its derivatives obtained from gas condensate. The company is responsible for undertaking all the necessary projects and activities directly or indirectly related to liquefying, storing, marketing, and exporting natural gas to customers. At its Sur plant, the company is currently operating three natural gas liquefaction trains, which have an enhanced production capacity of 11.4 million metric tons per annum.



Health, Safety and Environment

Oman LNG has, since its inception, prioritized safety in all its projects and endeavors, as safety plays a key role in all of the company's projects and activities. Notably, the board and management team have provided unparalleled support in this regard, leading to a commendable achievement of 16 million injury-free working hours in 2022. This accomplishment translates to an impressive 1,053 consecutive days. The company has demonstrated its commitment to safety by successfully completing 40 million kilometers of driving without any accidents or time-consuming injuries. The Oman LNG company continued its persistent efforts towards improving public awareness regarding environmental protection by sponsoring the Green Hydrogen Summit of 2022 held in Muscat. The summit served as a crucial platform to exchange experiences among various global companies in efforts to regulate carbon emissions and support the transition to renewable energy.

During the summit, the company also conducted a review of its support for a preliminary feasibility study examining the technical and economic aspects of the transition towards renewable energy and the reduction of carbon emissions in the industrial city of Sur. Meanwhile, the company maintained its collaboration with the "High Fly" National Alliance for Green Hydrogen and its strategic partners to help achieve zero neutrality by 2050. This collaborative effort not only fosters environmental protection and resource sustainability, but also secures a future for green energy. The company has also been an active participant in the "Dhelal" initiative, which seeks to plant around 1,500 trees in the Ras Al Shajar Nature Reserve to underscore the significance of expanding greenery. Moreover, the company has also planted over 10,000 trees in the vicinity of its industrial complex, thereby regulating carbon levels, augmenting oxygen, and preserving the environment.

Key Achievements:

The year 2022 stands out as an extraordinary year on multiple fronts, marked by numerous triumphant stories and breakthroughs across diverse domains. This comes at a time when the world is gradually returning to a sense of normalcy after grappling with unprecedented challenges posed by the Covid-19 pandemic for nearly two years. In 2022, Oman LNG achieved another milestone in its series of achievements with the production and loading of the 3000th shipment from its industrial complex in Sur, while maintaining the highest standards of health, safety, security, and environmental sustainability. This remarkable achievement bears testament to the company's unwavering commitment to its 22-year pursuit of producing liquefied natural gas and positioning the Sultanate of Oman as a recognized hub for the production of dependable and eco-friendly energy. Furthermore, in 2022, Oman LNG unveiled its post-2024 strategies and plans, demonstrating the company's continued determination to expand its reach into diverse international markets and explore novel opportunities in line with its goals of promoting economic diversification, enhancing LNG revenues, and bolstering the national economy. To this end, the company has translated this aspiration into concrete action by finalizing a binding agreement with three prominent Japanese LNG suppliers - Itochu, Jira, and Mitsui & Co - towards the end of last year. The agreement entails a supply of 2.35 million metric tons per annum starting from 2025. The Debottlenecking is also continuing in its final stages, and includes the identification of specific areas in the production lines, equipment or workflow process that may restrict the flow of the product within these lines, and thus can increase the total capacity. This project represents a crucial aspect of Oman LNG's ambitious strategy. As a result of these strategic initiatives, the company's LNG production has surpassed an average of 11.5 million metric tons for the first time in both the company's history and that of the Sultanate of Oman. Furthermore, in 2022, Oman LNG added yet another achievement to its list, as the energy project neared its completion stages. The primary goal of this project is to curtail carbon emissions while reinforcing the company's commitment to environmental conservation, as well as improving productivity and efficiency.

This year, Oman LNG has successfully dispatched a total of 176 LNG shipments, while simultaneously achieving an impressive plant efficiency rate of 97.57%.

In-Country Value (ICV)

Oman LNG places a great emphasis on nurturing local talent and capabilities, which is evidenced by its commitment to supporting young individuals through enhanced In-Country Value (ICV) efforts. In line with its major initiatives in the field of ICV, Oman LNG has attracted international expertise by sponsoring the ICV Forum, which witnessed broad participation from both regional and international stakeholders in Muscat. The forum shed light on ways to enhance ICV from a global perspective and learn about the experiences of global and regional companies. The event featured several engaging discussion sessions that delved into the pivotal role of the oil and gas industry in supporting energy and renewable energy transformations, as well as the potential of digital transformation and information technology. Oman LNG also supported the project of “Fath Al Khair Innovation Center” in Sur. The project aims to equip the educational sector with the latest Fourth Industrial Revolution technologies, while concurrently fostering a supportive environment for young talents and their innovative ideas. Additionally, Oman LNG has also provided funding for the Sur Oasis Incubator for Entrepreneurship in the industrial city of Sur (Madayn), which was inaugurated earlier this year. Furthermore, Oman LNG has delivered a series of high-efficiency electrical distribution transformers, which were rehabilitated locally, to Alseeb Vocational College. Additionally, the company has supplied several advanced electrical devices to Sur Vocational College to support their academic pursuits.

Social Responsibility

Social responsibility lies at the core of Oman LNG’s identity and activities. The company is committed to maintaining its strategic partnerships with both public and private sectors to address the needs and aspirations of the community. In support of this objective, Oman LNG sets aside 1.5% of its net after-tax income to finance social responsibility programs that are dedicated to diverse sectors including education, tourism, and environmental protection. In keeping with its commitment to lead the way in social responsibility initiatives, Oman LNG has signed a significant agreement with the Ash Sharqiyah South Governor’s Office to finance the construction of the Sur Public Park project at a total cost of approximately OMR 3 million. Undoubtedly, this vital project serves as a breath of fresh air and a public space for the people of the governorate, providing numerous investment opportunities for Omani youth and entrepreneurs to launch small and medium-sized enterprises within the park. As an attractive tourist destination for visitors and residents of Sur, the park will undoubtedly enhance economic and tourism activity in the Ash Sharqiyah South Governorate. This agreement, with an estimated cost of RO 4 million, seeks to support the ministry’s efforts in providing enhanced services to children with disabilities, developing the skills of local professionals working in this field, and improving rehabilitation centers for children with disabilities. Such agreement comes in line with Oman vision 2040.

Some of the social investment projects and initiatives that have been approved for 2022 are as follows:



The full completion of the construction and equipping of the National Autism Center.



The provision of funds to enhance skills and competencies related to the technologies of the fourth industrial revolution, in order to keep pace with the rapid advancements in technology and education. This program will be carried out at the University of Technology and Applied Sciences in Muscat



Supporting the establishment of a workshop for cars at the Salalah Vocational College



Providing advanced medical devices to enhance healthcare services for patients in the Kidney Dialysis Units at Taqa Hospital.



Supporting Jalan Bani Bu Ali Hospital by equipping its Maternity and Children’s Departments and the Neonatal Intensive Care Unit (NICU) with modern medical devices, which will significantly improve medical specialties and services.



Delivery of a number of modern vehicles and equipment to facilitate the establishment and maintenance of roads, waste disposal, and lighting pole repairs across the Ash Sharqiyah South municipality.



Supporting Saham Vocational College with modern educational equipment to enrich the educational experience of students.



Supporting and sponsoring the Oman Science Festival 2022 at the Oman Convention and Exhibition Center.





Oxy Oman

Oxy Oman is a wholly owned subsidiary of Occidental (Oxy), an international energy company with assets primarily in the United States, the Middle East and North Africa. Oxy has been producing hydrocarbons in Oman for nearly 40 years, where it has steadily increased production and reserves and is honored to partner with the Government of Oman. Today, Oxy is the largest independent oil producer operating in the country, covering more than 6 million gross acres (more than 24,000 gross square kilometers). Oxy's major operations are located in northern Oman, primarily in Safah and Wadi Latham Fields in Block 9, Khamilah Field in Block 27, and in Block 62, where we operate the Muradi Huraymah gas plant, and in south-central Oman in Block 53 at Mukhaizna Field, the largest producing oil field in the country. Oxy is committed to safeguarding the environment, protecting the safety and health of employees and neighboring communities and upholding high standards of social responsibility throughout its worldwide operations.

Pathway to Net Zero

Oxy's climate goals are to achieve net-zero emissions in its operations and energy use before 2040, with an ambition to do so before 2035, and net-zero emissions from its total carbon inventory, including the use of its products, with an ambition to do so before 2050. With decades of experience in large-scale CO₂ transportation, use and storage for EOR, Oxy is applying its carbon management expertise to advance low-carbon initiatives that it believes will sustainably enhance its business. Oxy's pathway to net zero prioritizes sustained investment in its people and communities. Oxy is focused on decreasing its total carbon footprint and helping others achieve the same goal.

Health, Safety and Environment (HSE)

Oxy Oman continues to conduct its operations in a manner that safeguards its employees and contractors, benefits neighboring communities, and advances innovative solutions to environmental challenges.

Safety is integral to our company's culture, and Oxy Oman has sustained exemplary safety performance through comprehensive methods, including empowering and training employees and contractors and supporting them with safe work systems, technology and proactive maintenance and asset integrity programs. In 2022, Oxy Oman employees and contractors worked for over 40 million combined personnel-hours while advancing its robust health and safety culture. In 2022, the combined Total Recordable Case Frequency (TRCF) was 0.32, and Oxy Oman employees and contractors worked 342 days with Zero Harm (no recorded injuries), and the company continues to be relentless in achieving a 365-day Zero Harm Goal.

In 2022, Oxy Oman successfully concluded COVID-19 programs, which were significant in safeguarding the health and wellbeing of our employees and communities. The company also successfully reinvigorated several HSE programs including, "HandSafe+", "Short Service Employees", "Safe Driving Practices", and "Health and Wellbeing Surveillance" for employees and contractors, all of which emphasize our focus on risk management, operational excellence, and continuous improvement.

At Oxy Oman, our employees drive our commitment to serve as an innovative and sustainable leader in the effort to accelerate the successful transition to a low-carbon future. In 2022, Oxy Oman continued its outstanding environmental performance, with zero reportable spills and zero Non-Conformances (NCRs). During the year, the company also advanced its Net Zero initiatives to focus on energy sustainability and lowering emissions. Oxy Oman remains on target for reducing emissions by 50% by 2030, and aims to achieve Zero Routine Flaring by 2027. We are working diligently to build new technologies and explore opportunities towards our commitment to Net Zero, including Oxy's expertise in Carbon Capture Utilization and Storage (CCUS), Net Power, and Enhanced Oil Recovery (EOR).

Key Achievements in 2022

Oxy Oman's gross production averaged 220 MBOED in 2022 (201 MBOED & 110 MMSCFD). The company achieved a gross production record at Block 9 Safah field with 103 MBOPD in September 2022; successfully tested 2 tight reservoirs in the Block 53 Mukhaizna field; and initiated a new gas pipeline in the Block 62 Habiba field.

Oxy Oman additionally achieved a 16.4% reduction in CO₂e emissions compared to the 2019 baseline, and is on track for a reduction of CO₂e emissions by 50% by 2030 and implementation of the zero-routine flaring project.

Human Resources

Oxy is proud to be a leading employer and community partner wherever it operates. The company hires, recruits and develops highly qualified and skilled people with a passion for producing life-enhancing energy products. Oxy Oman has developed and implemented a long-term Human Resources strategy which focuses on sustainable hiring and development of Omani talent.

This strategy has contributed to generating more than 3,600 direct employment opportunities and resulted in 94 percent Omanization of its workforce. In addition, 45% of Omani hires were job seekers, including fresh graduate degree holders and diploma holders, and a total of 462 locals from concession areas were hired and trained to become certified operators and technicians.

In 2022, Oxy Oman enrolled 220 university students and job seekers in its internship programs. In addition, Oxy Oman continues to hire job seekers in line with its development programs, and efforts are ongoing to define more opportunities to support its long-term Omanization plans.

Oxy has comprehensive initiatives to recruit and train Omani nationals and is committed to developing and promoting Omani nationals in positions from entry-level to executive management. Oxy Oman's Talent Management Strategy has resulted in the development of Omani leaders who have stepped into leadership roles. As of 2022, Oxy Oman's overall leadership roles are 93% Omanized.



Sustainable Development and Social Responsibility Programs

Oxy Oman sponsorships in 2022 focused on projects with sustainable, long-term impact for Oman’s communities. These projects fall under five categories: HSE, Education, Welfare, Culture & Sport, and Entrepreneurship. Collectively, the projects have positively impacted thousands of people throughout the Sultanate of Oman. Highlights include:



Exclusive sponsorship of the (.NXT) Jadeer program, which targets fresh graduates and job seekers.



Construction of outdoor sport courts for four schools across Al Wusta Governorate.



Construction of a first-of-its-kind linear park in Al Maabilah, Muscat Governorate in collaboration and coordination with Muscat Municipality.



Exclusive sponsorship of the .NXT GIG platform for .NXT Jadeer graduates and other freelancers to connect with companies and assist with identifying employment opportunities best suited for their expertise.



Honoring ceremonies for high performing school students in Al Wusta Governorate, Wilayat Adam, Bahla and Hamra Al Duru, as well as the top 100 General Education Diploma Graduate students across Oman.



Sponsorship of camel racing sporting events, a historic and cultural element in Oman’s local communities.



Exclusive sponsorship of the 2nd edition of the Oxy Equestrian Race in Al Dhahirah Governorate.



Funding of medical and rehabilitation equipment for the Ehsaan Yanqul Disability Center which assists people in need across Al Dhahirah Governorate.



Funding of VR headsets for the Ministry of Health to be used in local hospitals for pediatric treatments.

In-Country Value (ICV)

Oxy Oman continues to prioritize efforts to maximize In-Country Value (ICV) initiatives, by improving and building the capacity and capability of Omani contractors to develop a competitive and sustainable Omani supply chain. In Q2 2022, the ICV contribution of spending reached 45.1%, whereas spending on Small and Medium Enterprises (SMEs) has reached 18% in Q2 2022. The overall Omanization percentage within the Oxy Oman contractor community is steady at 52% in Q2 2022, and contributed to a 4.4% increase in total headcount from 14,690 in 2021 to 15,337 in Q2 2022.

In support of ICV initiatives, Oxy Oman established the Tasharuk Program for Omani SMEs in 2013. The program supports capacity building of Omani SMEs that demonstrate high potential for maximizing ICV and Omani job creation. The program has undergone 5 Phases and created a significant impact on the 14 participating SMEs. By end of 2022:



The headcount of the participating SMEs increased to 405 and achieved a growth up to 36%.



The average Omanization within the participating SMEs reached 71% with total of 259 Omanis headcount.



Three SMEs have already achieved 100%Omanization.



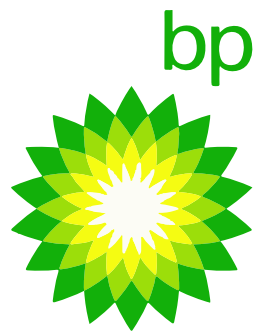
Overall, participants achieved up to 207% total increase in contract value.



10 ISO Certifications and 3 API Accreditations have been received by the participant SMEs; 74 of participant personnel have been enrolled in soft skill training; and 41 of participant personnel have been enrolled in technical training.

Phase 5 of Tasharuk focused on Renewable Energy – specifically Solar Energy, while Phase 6 will focus on Waste Recycling in Oxy Oman’s concession areas. In addition, Oxy Oman has initiated and supported several ICV initiatives in 2022 to improve the capacity and capability of Omani contractors:

- Provision of Temporary Power Generators Services, under Vendor Development Program.
- Provision of Fiscal Metering System, under Vendor Development Program.
- Provision of Oilfield Maintenance and Operations Services, as a Ring-Fencing Initiative.
- Provision of Mukhaizna Air Charter Services, as a Ring-Fencing Initiative.
- Supply of High-Density Polyethylene (HDPE) Lining for flowlines, as a Ring-Fencing Initiative.
- Fuel Distribution Services (Provision of Temporary Power Generator services), as a Ring-Fencing Initiative.
- Provision of Gyroscopic Services, as a Ring-Fencing Initiative.
- Supply of Gas Lift Materials and Related Services, as an ICV Opportunity.



bp Oman

As part of bp's transition from International Energy Company (IOC) to an International Energy Company (IEC), and in alignment with the Sultanate of Oman's objective to achieve net zero by 2050 and its green hydrogen strategy, in 2022, we signed a Strategic Framework Agreement (SFA) with the Ministry of Energy & minerals to support the potential development of world-class renewable energy and green hydrogen project in Oman.

Since then, we have started a data campaign and successfully installed four LiDar devices in designated areas of interest.

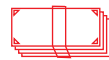
Key Achievements in 2022:



Produced almost 1.5 billion cubic feet of gas per day, with reliability exceeding 99.7%



Drilled six new wells, bringing the total number of wells drilled and completed to 146.



\$247 million spent with Omani-registered companies



Achieved 92% Omanization rate



Launched the eighth season of our social investment programmes



Safe reduction of 67,167 tons of CO₂ equivalent emissions

Keeping our people Safe

Safety comes first in bp and always will. In 2022, we rolled out bp's safety leadership principles in Oman as part of a wider roll out across all bp's global operations. The five safety leadership principles set out a clear guide for our people on how we all should think, act, behave and lead on safety. In addition, several achievements were accomplished in 2022:

- Rolled out International Association of Oil & Gas Producers (IOGP) process safety fundamentals at Block 61 and head office.
- Delivered the regional plan to promote mental health and wellbeing
- Completed 7.74 million working hours, with zero major incidents and one day away from work case "LTI"
- Registered zero process safety event Tier1/Tier2 incident, for the first time in 5 years (since 2018)
- Drove 12.33 million kilometer at Block 61 with one High Potential rollover incident that was also recorded as the single recordable injury and Day Away From Work Case (DAFWC)

Progressing towards net zero

Getting to net zero by 2050 and caring for our planet are key pillars of our sustainability frame. In 2022, bp Oman started working on the sustainability implementation plans which sets out the actions that we need to take to achieve bp's sustainability aims. Our "carbon reduction roadmap" was recognized by the Oman Energy Association (OPAL) best practice awards. In addition, the following achievements were accomplished in 2022:

- Safely reduced 67,167 tons of CO₂ equivalent emissions through several sustainable emission reductions projects
- Planted 3,734 trees in Block 61 and targeting 5,000 trees by end of 2024
- Applied green completion to nine wells, in addition to five re-testing wells which led to safely avoiding around 89,500 tonnes of CO₂e



Supporting Local Economy

At bp, we believe in making a positive impact on everywhere we work, and with everyone we work with, especially with our partners, suppliers, and customers. Supporting local Omani companies and Small and Medium Enterprises (SMEs) is a key part in our in-country value (ICV) strategy. In 2022, we:

- Spent \$247 million with Omani registered companies, equivalent to 90% from our total spend
- Spent \$14.8 million with local SMEs and LCCs, equivalent to 6% from our total spend
- Launched the first national training programme 'Ruwad' and signed an agreement with Halliburton to train 30 candidates to develop local capabilities

In the same year, the ICV team undertook a number of initiatives beyond procurement to support Omani SMEs such as:

- Delivered the first sub-contracting E-tendering trial with maintenance, repair and operation contract with the aim of enhancing transparency
- Completed the first trail with Esbaar (local SME specialized in drone and artificial intelligence) for drone inspection scope at block 61 as part of preventive maintenance activities
- Engaged with the Authority for SME Development to share our knowledge on the vendor development programme (VDP)

Our people

Our talented workforce plays a key role towards achieving our milestones, from supporting energy security to implementing sustainable initiatives that support the economic development of Oman.

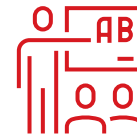
In 2022, we celebrated the launch of 'People at bp Oman' book which focuses on our staff achievements and development journeys. The book highlights our commitment to strengthening the skills and capabilities of our people.

- Achieved 92% Omanization and 70% at the leadership team
- Implemented a new work/life balance (60/40) to help on working days flexibility
- Continued our graduate programme which offers hands-on experience while working in full-time roles
- Placed 42 Omanis in global roles over the years, contributing to different regions and entities, and offered more than 135 Omanis international assignments at different bp locations

Improving people's lives

In 2022, bp Oman signed five agreements to kick off the new cycle of social investment programmes (SIP) for 2022/2023. The new programmes aim to deliver on Oman's 2040 objectives and bp's sustainability aims of improving people's lives.

By the end of 2022, we're proud to have benefitted over 148,000 people through 144 initiatives since we launched the programme in 2014.



Benefited over 40,000 people from the programmes in Oman including: over 20,000 school students and 1,300 college and university students, around 500 people with disabilities and 200 entrepreneurs



Launched the 'Build your resilience' programme by Outward Bound Oman to support the mental health and wellbeing of 1,000 members of community affected by cyclone Shaheen in 2021



Partnered with Nafath, an Omani company specialised in renewable energy manufacturing, to deliver independent solar energy systems for water pumps and greenhouses, reducing electrical costs for farmers in Al Bathinah governorate; areas that were previously affected by cyclone Shaheen



'Sail Free,' Oman's first national para sailing team participated in international championships in Italy, Japan, United Kingdom and Belgium



Supported 19 small and medium enterprises in Adh Dhahirah through the 'Habbah for SMEs' programme in partnership with Youth Sada; which aims to diversify the economy in the region



Reached 68 Omanis graduate from the 'Tahlya 5' programme in partnership with MEDRC to support Omanization in the desalination sector



Enhanced the employability skills of 185 job seeker through the 'Teqdar' programme, 37 of whom received employment because of the programme



Daleel Petroleum L.L.C.

The Journey of 20 Years of Excellence

Daleel Petroleum celebrated 20 years since its inception in 2002. A journey that witnessed achievements, challenges and excellence in its operations and qualified national professionals.

Daleel Petroleum seeks to improve and develop oil and gas reserves by advanced technology to ensure the best efficiency in extracting these resources in Block 5 concession area, in order to achieve social and economic benefits for society and stakeholders.

Daleel Petroleum has steadily moved towards achieving the highest possible results in the area of health, safety, security and the environment, in an extension of the company's principles and values with regard to the safety of individuals, communities, the environment and assets.



The Company Received Three Awards



Al Roya Business Award
– Under the Category of In-Country Value Programs



OPAL Best Practice Award -
Beam Pump Surveillance via Machine Learning



CAE Awards- Beam Pump
Surveillance via Machine Learning

Daleel Petroleum recertifies for International Standards (ISO) for:



Quality Management
System- 9001:2015



Environmental Management
System- 14001:2015



Occupational Health and
Safety Management System-
45001:2018

Operational Excellence

Operational Excellence is one of the key features at Daleel Petroleum, which evidently reflects on the management of its operations. Daleel pursues its ambitions in acquiring both practical and informative knowledge by utilizing its inherent strengths of technology and professional talents.

2022 Key Activities

- 1st operator to achieve ZERO Routine Flaring after the commissioning of the AP Flare Project.
- Commissioned the additional Separation facilities & additional Water Injection Pumps.
- Initiated the chemical EOR expansion project.
- Successfully discovered 2 fields which are Bushra Central and Bushra Far North West.
- Completed 2.5 Year PSM Tier-1 incident Free.

Omanisation and Empowerment

Daleel Petroleum strives to empower employees in accordance with individual and group development plans offering internal and external training opportunities, in demonstrating its commitment to support the employees' ambitions. Corresponding to the Sultanate's direction to provide opportunities for Omanis, the Omanization rate spearheading the percentages of Omanization within the sector to 97%.

Daleel maintains its support to national talents by allocating training opportunities in different disciplines for different periods responding to the needs. It also contributes to the training of a number of graduates under the national Edaad Programme.

In-Country Value

As one of the leading production companies in the Sultanate, Daleel Petroleum fully comprehends the significance of contributing to the Omani economy by driving In-Country Value programs as part of its business and developing local service providers and local products. One of its key initiatives this year:

- Delivered a Vendor Development Program for the Live Line Work (LLW) with
- Marmul Falcon Company which will develop the first local training center for direct
- pneumatic electrical interconnection with standards that comply with the
- regulations for working in medium voltage lines .

Social Responsibility

Daleel Petroleum is committed to develop local communities through its contribution in various social programs, the most prominent projects implemented in 2022

Space Corner Project



Supporting the enhancement of medical equipment



Supporting families affected by climatic conditions



Developing the Technical Infrastructure of Oman Cancer Association



Green Hydrogen Study



Ramadan Campaigns









CC ENERGY DEVELOPMENT

CC Energy Development is an international independent company that was founded in Oman in 2007 and began operating in 2010. Its main focus is on exploring crude oil and natural gas resources in the Sultanate. The company's approach to growth is based on a combination of global perspectives and local partnerships, as demonstrated by its Omanisation rate of 92% and the production of over 100 million barrels of oil since 2010.

Sustainable and profitable activities and businesses are key to the company's success, an integral part of its ideas and ambitions, and a pillar of decision-making, all while focusing on the transfer of expertise and knowledge and contributing to the growth and development of the oil and gas sector in Oman. With this in mind, CC Energy Development and its partners are committed to continuing investment in oil and gas exploration and enhancing production activities with a view to achieving sustainable production and growth.

The company is characterized by diversity and responsibility and is based on the highest professional and ethical standards. We believe that individuals are the secret to the success of our business and we aim to create a positive and tangible impact in the communities in which we operate. Our successful exploration strategy has maximized the growth and development of our business with an average daily production of approximately 35,000 barrels of oil per day. The company is unique in its constant aspiration to innovate and invest in developing its capabilities and increasing its oil and gas production.

Assets and Major Achievements

CC Energy Development is conducting exploration and production work in Block 3 and 4 in the east and center of Oman.

Company Assets in Oman

Block 3 and 4

CC Energy Development Operator

Tethys Oil Partner

Mitsui E&P Middle East BV Partner



The Company's Key Achievements in the Sultanate of Oman (in 2022)



We have maintained our commitment to follow the best standards of health and safety and we have expanded our safety driving program.



We carried out an intensive exploration campaign during 2022 and completed a 3D seismic survey of 4,141 square kilometers in the south of Block 4, and we plan to conduct a seismic survey of 7,250 square kilometers during the years 2023-2024



We have operated an additional excavator and now have a total of 4 excavators until the end of 2022



We have recruited 10 new graduates, 4 female employees, 3 of whom are in the field of work



We are committed to transformation and strengthening our position as a low-cost, environmentally responsible operator. To achieve this, we prioritize sustainable, low-carbon operations and are further empowered by our gas-to-energy project.



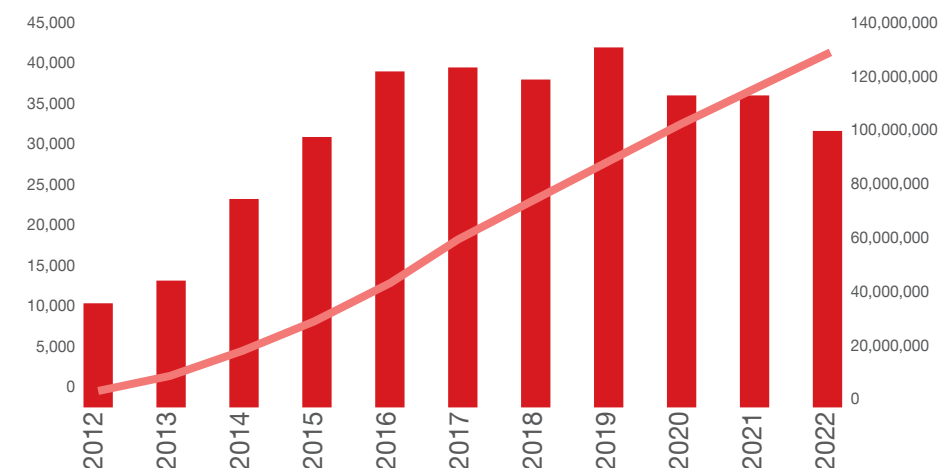
90% of our total purchases were made from local suppliers.



As part of our inventory project, we have assigned four projects worth more than 13 million US dollars to local companies classified according to the business portal platform.

Oil Production

Areas 3 and 4 (2012 – 2022)



Capabilities Building

CC Energy Development understands that technical excellence relies heavily on the capabilities and potential of its employees. As such, the company is committed to developing the skills and capabilities of Omani employees at all levels and actively contributing to building local talent capacity for the sustainable benefit of future generations. The company now has 696 employees with an Omanisation rate of 92%. Our team also includes a number of non-Omani staff with great experience, as we always seek to employ competencies to exchange experiences and train and guide Omani employees.



The company offers a flexible and unique work environment for recent graduates, providing numerous career opportunities in fields such as petroleum engineering, geology, project engineering, operations, maintenance engineering, and more.



Our good practices and team culture make CC Energy Development a competitive workplace and inspire Omani talent, providing them with an ideal platform to learn, grow, and advance their careers.

Committed to Contribute to the Growth of the National Economy

CC Energy Development is instrumental in driving the growth of Oman's economy and is committed to making a sustainable contribution to the development of the oil and gas sector. The company is cognizant of its responsibility to make significant investments in the communities where it operates and develop businesses that will create sustainable and long-term value in the Sultanate. As a global operator in the Sultanate, we are committed to developing national talent, making our operations more cost competitive and contributing to the qualification of a generation of national cadres at the highest level of efficiency.

Our ICV program is based on the following key pillars:



Contribution to the Omanisation of the team through recruitment, education, training and development. In this regard, we have succeeded in providing many Omani employees with skills and experience, and we have provided graduates with a recruitment program in addition to training programs through external providers of training services.



Supporting and developing the most prominent local community contractors as we have recently signed a long-term contract with Al-Sawari International Investment Company SAOC.



Contribution to the development of the business of newly established Omani start-ups, exchange and transfer of expertise, and provide job opportunities. We also collaborate directly with SMEs, providing them with guidance and support in tender preparation and strategic planning to help them enhance their competitiveness.

Health, Safety and Environment

CC Energy Development prioritizes its workforce and places great emphasis on providing a safe and healthy work environment for its employees. As one of its core values, the company remains committed to adhering to the highest standards of health, safety, and environmental practices. During 2022, we maintained our strategy and practices related to this aspect as we held the annual Forum for Health, safety and the Environment, and launched our safety leadership program with the aim of developing employees' skills, following a positive culture in the work environment and leading safe programs to carry out business. Additionally, the company achieved success in implementing a campaign to educate employees on leading healthy lifestyles.

The company's pillars in this area are as follows:

Trust: The company is committed to fostering trust between employees and contractors and prioritizing safety, ensuring that all personnel prioritize safety when executing their daily tasks and job responsibilities.

Compliance: We prioritize instilling and reinforcing safety regulations to prioritize the preservation of human life, thereby boosting employees' confidence in adhering to these regulations as the most effective means of ensuring a secure working environment.

Empowerment: We strive to uphold individuals' rights to halt work, without fear of retribution or liability, in the event they perceive that their tasks will be executed unsafely or if they lack a clear comprehension of their job duties or operational procedures, or if the instructions are ambiguous.

Work Environment without Injuries: The company has a zero-tolerance policy towards unsafe behaviors or activities and strictly adheres to proper safety protocols. Additionally, it actively promotes a culture of intervention and prevention of unsafe behaviors. The company firmly believes that strict adherence to these safety rules is essential for creating a safe working environment that empowers both employees and contractors, whether on the job site or in management positions. By doing so, the company is able to create a culture of "value" whereby all operations and daily job duties can be performed without any injuries

In light of the recovery in the economy, we are continuing our tireless efforts and working at full capacity to achieve further successes and achievements. To accelerate our operational base, we are committed to deploying additional resources while continuing to enhance our exploration program through the incorporation of three-dimensional seismic surveys, as well as maintaining an ongoing drilling, exploration, and evaluation program. We have a well-defined strategy and a robust action plan in place to minimize flaring and greenhouse gas emissions, which is being implemented through our gas-to-energy project. Moreover, our emphasis on maintaining larger buffer stocks and our continuous efforts to curb harmful emissions are crucial steps towards building a sustainable future. We remain committed to seizing every opportunity to expand our operations, enhance our engagement with the local communities, and make meaningful contributions to Oman's economic and social progress.



Tethys Oil

Overview

Since 2006, the Sultanate of Oman has been the primary operational hub for Tethys Oil, a Swedish company. Tethys Oil has been a vital partner in the successful exploration and production operations of franchise areas 3 and 4, both of which started producing in 2009. In 2017, Tethys Oil expanded its exploration business to other geographic locations within the Sultanate by acquiring its first 100% franchise right in operating area No. 49. This was followed by the assignment of franchise area No. 58 to the company in 2020. Tethys Oil’s expansion efforts were not limited to these areas, as the company also acquired two shares of the franchise from area No. 56. The first was a 20% share in 2019, and in February 2022, it further expanded by acquiring a 45% share in MEDCO Arabia, becoming the operator of operations in Area 56.

Tethys Oil places great emphasis on conducting its operations in compliance with environmentally, socially, and economically responsible standards, with the ultimate goal of achieving sustainable development in Oman’s oil and gas industry. In 2022, the company undertook a thorough analysis to develop a comprehensive sustainability strategy for the future.

Our Commitment

Environment	The society	Governance
We use natural resources in a responsible way	We invest in our local communities	We live as per the highest moral standards.
Executing operational activities in ways that create minimal inconvenience to the environment and people	To contribute positively to the quality of life in the communities where we work by minimizing impacts and creating benefits	There should be administrative procedures applicable to promote honesty, integrity, transparency and accountability

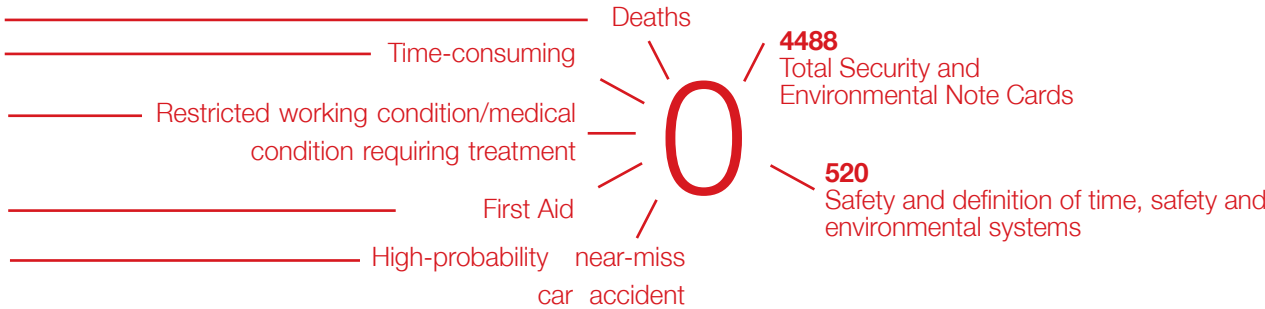
Organizational Structure

All operations and activities of Tethys Oil Company are conducted exclusively in the Sultanate by a dedicated team of Omani professionals, consisting of engineers, geologists, and geophysicists. These individuals have joined the company upon completing their education and have further enhanced their expertise through years of experience gained while growing within the organization. In terms of recruitment, the company places significant emphasis on prioritizing Omanis, resulting in an impressive Omanisation rate of 85% within the company. It is worth mentioning that Tethys Oil Company is currently in the exploration phase.

Health, Safety and Environment

Tethys Oil upholds the importance of health, safety, and environmental considerations as fundamental aspects of its operations. This commitment is evidenced through the company’s focus on transparency, responsibility, and thorough planning in decision-making processes. Tethys Oil aims to cultivate a work environment that is free from accidents. In 2022, Tethys Oil continued to enhance its health, safety, and environmental capabilities by implementing advanced risk assessments and mitigation plans. Tethys Oil and its contractors have successfully maintained an impressive record of 1,514 days without any time-consuming accidents since the commencement of work in Area 49. The program of work included a total of 881,716 working hours and driving distances estimated at 634,453 km since the start of the seismic survey, preparatory construction and drilling of wells in all concession areas of Tethys Oil Company.

Security, safety and environment statistics from 2018 to the end of December 2022



Sustainable Operations

Sustainability considerations are integrated into all stages of a company's activities in various ways. For instance, during exploration and assessment activities in franchise areas 49, 56, and 58, the environmental impact is minimal since operations are sporadic. On the other hand, areas 3 and 4 require more extensive and detailed analysis due to the ongoing production processes.

Area 49

In 2022, Tethys Oil secured an extension for the initial exploration phase to evaluate the outcome of Thameen-1 well. Upon completion of the assessment, the company intends to proceed with the hydraulic fracturing process to determine the commercial viability of oil production from the reservoir layer.

Area 56

In 2022, the primary focus in franchise area 56 for Tethys Oil is on drilling one exploratory well and four appraisal wells, which includes three appraisal wells in the Al-Jomd field located in the northwestern part of the franchise area. Following the promising results, preparations have been made to conduct a production test for these three wells. It is expected that the test will start in the first quarter of 2023 and for a period of 6 months to assess the oil reserves and the rate of production from wells. The derived information will be instrumental in assessing the economic viability of production activities within this field.

In addition, a three-dimensional seismic survey covering an extensive area of 2,000 square kilometers was conducted in the middle of the franchise area. The acquired data is currently being processed and analyzed, with completion anticipated in early 2023, before the start of exploratory well drilling this year.

Area 58

In 2022, Tethys Oil's primary focus was to prepare for planned exploratory well drilling. To this end, a comprehensive three-dimensional seismic survey covering an area of 450 km was carried out in the region south of the Lahn well. The preliminary results of the survey indicate that this particular area shows great promise for the success of the well.

The conducted survey in the southern part of the region (south of Lahn and Fahed) has enhanced the region's future potential, as per the geological model developed prior to the selection of the exploratory well location.

Communicating with the Local Community

The Tethys Oil Group of Companies is firmly committed to achieving a positive impact on the host community by proactively engaging with stakeholders, including local communities, local government, and civil society groups. This involves identifying any concerns that may arise as a result of the company's operations and developing solutions that benefit all parties involved.

Social Responsibility

Tethys Oil strives to establish a collaborative partnership with its stakeholders, with the goal of fostering trust and respect among individuals, society, and government within its operating environment. Maintaining positive relationships with host countries is essential to the company's policies, including adherence to state sovereignty and the rule of law.

During 2022, the following activities were conducted to support the local community:

- Providing families registered under the social security system in the states of Al Jazer, Shalim, the Halaniyat Islands, Thumrait and Muqshin with the provisions of the month of Ramadan through a fasting Iftar program.
- Supporting the World and Arab Water Day, which was held in Dhofar Governorate.
- Support the establishment of an introductory classroom in a school in Al Jazer.
- Contributing to the preparation of the Empty Quarter Festival 2023 in Thumrait.
- Sponsoring the Global Forum with the Future of Water and Humanity Conference in Muscat.
- Joining the Oman Environment Society through our institutional membership in 2022
- In addition, Tethys Oil, along with its partners, CCID and Metsoi, sponsored a number of community development events in areas 3 and 4.





About OQ: :

For many decades, OQ has been growing steadily as an Integrated Energy Group with roots in Oman. Wholly owned by the Government of Oman and an integral part of Oman Investment Authority (OIA), OQ manages direct energy investments within the sector such as Oil & Gas Exploration and Production, Infrastructure & Transportation for energy, Oil Refining, Petrochemical Production, Oil Marketing, and Power Generation. Through strategic partnerships, it has brought foreign investments to the Sultanate of Oman, contributing to the nation’s economic growth and further enhancing the energy security.

OQ operates across 17 countries covering the energy value chain from exploration and production to marketing and distribution of end-user products to serve more than 3,000 customers across 80 countries. As part of its commitment to responsible growth, OQ strategically applies innovation, technology and extensive experience towards the development of alternative energy. OQ’s endeavors are fueled by the vision to be the nation’s partner for energy transition in tandem with Oman’s Vision 2040 to create a progressive and diverse society.



Health, Safety, Security, and Environment:

OQ always strives to deliver safe, reliable, and compliant execution of business. The goal is zero harm to people, environment, and property. We aim to build a sustainable safety culture that requires visible and committed leadership, a high level of participation from employees and contractors, and the development of learning safety in the workplace.

OQ expended a total of 101 million manhours during 2022. Unfortunately, 34 total recordable incidents (TRIF) were reported, including two fatalities. OQ has since sought to address the root cause through thorough investigations and formulating preventive measures and mitigation plans with involvement of OQ leadership.

2
Fatalities

9
Lost Time Injuries

7
Restricted
Work Cases

16
Medical Treatment
Cases

Corporate Social Investment:

Corporate Social Investment (CSI) is one of the key pillars demonstrating OQ’s commitment towards serving the community and delivering social, environmental, and economic values. OQ believes in the benefits that CSI brings to both businesses and the local community through numerous social projects. Those projects contribute positively to socio-economic development and help achieve better prosperity for the local community.

Sponsorships & Initiatives

53
No. of Approved
Sponsorship &
Initiatives

External Affairs Management

817
External Affairs
Engagements across Oman
22
Outreach Programms

CSI Projects

5
Total No. of Completed
Projects

Volunteering

47,534
Beneficiaries
1,338
No. of Volunteers
49,534
Volunteering
Hours

In-Country Value:

Adopting a ‘Think Global and Act Local’ ideology, OQ believes in giving back to the communities in which it operates by enabling their development and acting as catalysts for positive change. As a result of translating this mindset, OQ has launched various initiatives that support passionate young Omanis to realize their dreams, whether entrepreneurial or career oriented.

In the company’s major projects, OQ contributed to the local goods, services and small-to-medium enterprises (SMEs) through OQ contractors, as well as providing scholarships and training opportunities for Omanis.

ICV Performance Trend (2020-2022):

Below are key highlights related to the proportion of spending on local suppliers for 2020, 2021, and 2022.

