الدقم الاقتصادية
Duqm Economist

A Quarterly magazine issued by the Public Authority for Special Economic Zones and Free Zones **33rd Issue - Oct. 2023**

DUQM ECONOMIC FORUM

Duqm leads green industries forward

In this issue: A full coverage on the Duqm Economic Forum

الهيئة العامة للمناطق الاقتصادية الخاصة والمناطق الحرة
Public Authority for Special Economic Zones and Free Zones
Sultanate of Oman
سلطنة عمان

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- Users can access plot information, such as type of activity, usufruct rates, location coordinates, area

Omap OBJECTIVES

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- To support the digital transformation in the special and free industrial and economic zones
- To provide easy-to-access, accurate spatial data to support decision-making process
- To promote investment opportunities
- To allow amateur and interested users to feed data into OMAP
- To promote tourism through identifying tourist destinations
- To enable investors and users to access detailed and accurate spatial data through interactive maps
- To use OMAP in urban planning processes and future expansion

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Duqm الدقم المنطقة الاقتصادية الخاصة Special Economic Zone
المنطقة الحرة بالمزيونة AL MAZUNAH FREE ZONE
خزائن Khazaen
SOHAR PORT / FREEZONE
المنطقة الحرة بصلالة Salalah Free Zone The World Within Your Hands

New and Changing Opportunities

Stephen Thomas
CEO
Renaissance Services

The Special Economic Zone at Duqm (SEZAD) has consistently generated new investment opportunities year after year. During the initial years after SEZAD was established, Renaissance Services took the initiative to establish a residential complex for workers that met the highest international standards and requirements of the International Labor Organization. The company invested around RO 100 million for this landmark project that would go on to meet the requirements and aspirations of SEZAD workers including engineers and project managers.

When Renaissance drew up plans to invest in SEZAD, we were betting on its ability to succeed. Today, we can confidently say that our optimism has been proven right as we continue to see the level of demand for residential units in Duqm increasing, though the number of real estate projects in Duqm has multiplied several times over the past few years.

One of the key factors for Duqm is its advanced infrastructure that attracts new investments. The Duqm Airport, Port of Duqm, fishing port, fisheries and food industries area, major road projects, communications services, electricity, water and other services are all playing a vital part in the growth and development of the zone.

These facilities also play a crucial role in SEZAD's ability to achieve other successes within current global trends, which was also highlighted by the Duqm Economic Forum in October 2023. The forum highlighted new green investment opportunities including green hydrogen, green steel industries and renewable energy. This means that SEZAD is undergoing a major transformation in leading investment in green industries and providing opportunities for growth and success. SEZAD has also succeeded in localising important projects such as the Duqm Refinery, oil storage facilities, the integrated power and water plant, the KARWA Motors plant as well as many other tourism, commercial and industrial projects.

All of this success can be attributed to the sound policies adopted since the zone was established in 2011. The provision of an integrated package of incentives, benefits and legislation attracts investment. The dedication shown by the Public Authority for Special Economic Zones and Free Zones (OPAZ) has provided it with the means for its success in enhancing electronic services and encouraging investments in the fields of Artificial Intelligence. OPAZ has a clear vision for the future of Duqm and their efforts to overcome the challenges facing investors have put SEZAD in the spotlight as a major investment destination in the Sultanate of Oman. The zone is able to accommodate new projects every year, thereby cementing its position as a growth hub full of opportunities.

All of this success can be attributed to the sound policies adopted since the zone was established in 2011. The provision of an integrated package of incentives, benefits and legislation attracts investment

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The magazine welcomes specialised researches and academic studies

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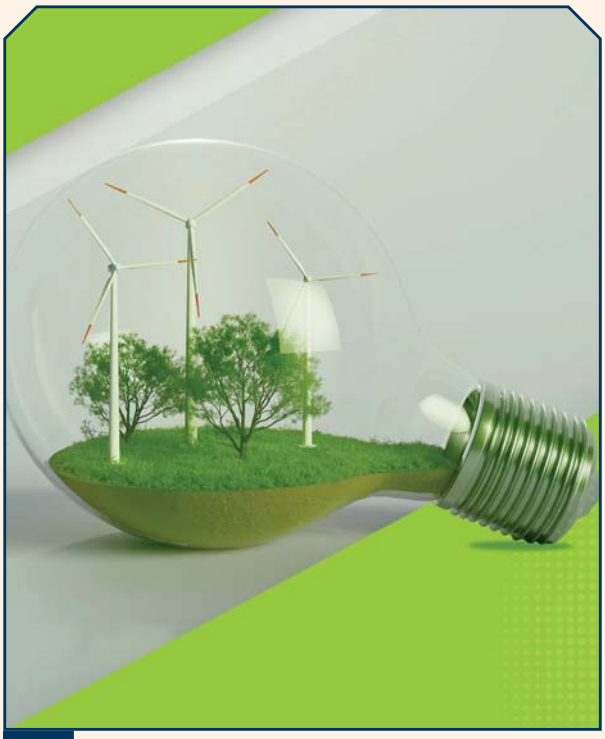

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In Its third meeting for the year 2023

OPAZ Board of Directors approves the general framework of OPAZ and its affiliated zones' 2024 annual plan

Muscat - الدقم Duqm Economy:

The Board of Directors of the Public Authority for Special Economic Zones and Free Zones (OPAZ) held its third meeting for the year 2023, chaired by His Excellency Dr. Ali bin Masoud Al Sunaidy, Chairman of the Board, at OPAZ headquarters in Muscat.

During the meeting, the Board of Directors approved the general framework of OPAZ' annual plan for 2024 and its affiliated zones, which will be submitted to the Council of Ministers. The meeting touched on a number of subjects, including the regulation of electricity sector in the Special Economic Zone at Duqm (SEZAD) between the Public Authority for Special Economic Zones and free Zones and the Authority for Public Services Regulation (APSR). The Board also approved unifying usufruct fees for lands allocated to companies providing services in SEZAD and directed OPAZ Management to study the possibility of applying the same in all affiliated zones, in coordination with the zones' management.

The Board of Directors, further, discussed the requests submitted to extend the exemption period from paying usufruct fees for some local companies in the zones supervised by OPAZ and actions were taken accordingly.

It is noteworthy that the Public Authority for Special Economic Zones and Free Zones (OPAZ) was established as per the provision of the Royal Decree No. (105/2020), issued on August 18, 2020. OPAZ oversees the Special Economic Zone at Duqm, free zones in Sohar, Salalah and Al Mazunah and any other special economic zone or free zone. It also oversees the Public Establishment for Industrial Estates (Madayn) as per the provision of the Royal Decree No. (53/2022), and Khazaen Economic City, as per the provision of the Royal Decree No. (44/2023) establishing the City.

Ministry of Higher Education, Scientific Research and Innovation decides:

Study at Duqm University College to commence next year

Muscat - الدقم Duqm Economy:

The Ministry of Higher Education, Scientific Research and Innovation issued Ministerial Resolution No. 65/2023 to start studies at Duqm University College for the next academic year 2024/2025.

The decision stipulated that the study at the College should be within two programs; the first is Bachelor of Science with Honours in Logistics Management, and the second is Bachelor of Science with Honours in Construction Environment.

The decision comes after the founders of the College completed the academic requirements, material and human components, needed for the implementation of the authorized study programmes of the college.

Back in September 2021, the Ministry issued a ministerial decision No.86/2021 to establish Duqm University College. The decision stipulated that a private university college called Duqm University College will be established. It will have an independent legal personality and shall be headquartered in the Wilayat of Duqm in the Wasta Governorate. It also said that Duqm University College is subject to the laws, regulations and decisions regulating the applicable private colleges and higher institutes, and its president represents it before others.

The college is to accept Omani and non-Omani students who hold a general education diploma or its equivalent in accordance with the conditions determined by the College that align with the Ministry's laws, regulations and decisions.

Patroned by HH Sayyid Theyazin.. Duqm Economic Forum discusses investment in green industries

Duqm - الدقم :

On the 16th of October, His Highness Sayyid Theyazin bin Haitham Al Said, Minister of Culture, Sports and Youth, inaugurated the first Duqm Economic Forum at the Special Economic Zone at Duqm (SEZAD). The two-day event is the first of its kind in the zone to discuss investment issues in the green industries sector, renewable energy and green hydrogen. Located along the international trade routes between East and West, the SEZAD acts as an industrial and investment center and a gateway to international trade. It has an integrated infrastructure that includes the Port of Duqm, Duqm airport, a multipurpose fishing port, an oil refinery, a dry dock for ship repair, and many industrial, commercial and tourism projects.

Strengthening Duqm's leading role

The Forum witnessed the signing of a number of agreements and memorandums of understanding for 5 projects in the green industries sector in the SEZAD, which enhances the leading role of the zone in attracting green industries projects and supports these industries in Duqm. An agreement was also signed to build a dual carriageway linking the Duqm center with oil storage terminals in Ras Markaz and renewable energy projects in the Willayat.

Opportunities for modern production

The Forum focused on the potential and opportunities of modern production in Duqm, and the role played by the zone in the transition to the use of renewable energy and utilization aspects in green hydrogen projects, steel industries and others. It highlighted the possibilities of the Special Economic Zone at Duqm in attracting more large multinational projects, through extensive discussions and constructive dialogues aiming to set up further economic partnerships that establish new projects in

The Forum focused on opportunities of modern production in Duqm and its role in the transition to renewable energy

Extensive discussions and constructive dialogues to set up economic partnerships

CEOs of international companies showcase their expertise in the green industries sector

the zone. The Forum also discussed opportunities for SMEs to further grow and strengthen their presence in the zone.

The Forum witnessed a remarkable attendance by many local and foreign companies investing in the SEZAD, experts and specialists in the green industry, renewable energy, green hydrogen and the petrochemical sectors, to identify the business opportunities available in the zone.

Discussion panels

Over a two-day period, 5 discussion sessions were held on the possibilities of Duqm in the field of green industries, renewable energy and green hydrogen, the expected role of the zone in driving the change in these sectors, the opportunities available in supply chains, the expected transformations in the petrochemical sector and its projected contributions to the green industries sector. Experts and CEOs specialized in these sectors from Oman, Brazil, USA, Japan, Saudi Arabia, Belgium, Ireland, India and a number of other countries participated in the discussions.

Field visit

The participants visited the most prominent projects in the SEZAD, including the Port of Duqm, the dry dock, the Duqm Refinery and many other projects. They were informed about the opportunities available in the zone in various economic sectors and investment incentives.

The Forum aimed at attracting new companies to invest in the zone, especially in the green industries sector, after the success achieved in the past years in attracting pioneering projects in various economic aspects and the attention paid by the government to the growth of the zone and its leadership.

Ahmed Akaak presents Duqm potentials in green industries

Duqm - الدقم :

Eng. Ahmed bin Ali Akaak is the Acting CEO of SEZAD, gave a visual presentation about the potential of the zone, infrastructure and the most prominent existing projects.

He demonstrated the investment zones in the comprehensive scheme of the Special Economic Zone at Duqm, including the renewable energy zone. Welcoming investors from different countries of the world, he also discussed the advantages of investing in the zone and the incentives that are offered to investors.

To review investment opportunities in the renewables

HH Sayyid Theyazin Meets CEOs of Global Companies

Duqm - الدقم :

His Highness Sayyid Theyazin bin Haitham Al Said, Minister of Culture, Sports and Youth met with some CEOs and Board Chairmen of global companies who participated in Duqm Economic Forum. The meet reviewed the investment opportunities available in the fields of renewable energy and clean energy, such as green hydrogen and green ammonia that come in line with Oman's approach to achieve the goals of zero carbon neutrality by 2050. It also touched upon facilities provided to investors and the investment climate of the Sultanate of Oman, especially in the Special Economic Zone at Duqm.

His Highness Sayyid Theyazin bin Haitham Al Said, Minister of Culture, Sports and Youth lauded the agreements and memorandums of understanding signed by a number of international companies with the Public Authority for Special Economic Zones and Free Zones (OPAZ) to implement projects in the green industries sector in SEZAD. He called on other companies to take advantage of the investment opportunities available in the various economic zones and free zones in Oman generally, and in SEZAD specifically.

On their turn, CEOs and Board Chairmen of the global companies commended the promising investment opportunities and multiple logistical services they saw in SEZAD.

The meeting was attended by Dr. Ali bin Masoud Al Sunaidy, Chairman of OPAZ, Dr. Abdullah bin Nassir Al Harrasi, Minister of Information and Abdulsalam bin Mohammed Al Murshidi, Chairman of Oman Investment Authority.

Qais Al Yousef: The Forum emphasizes the importance of Duqm as an integrated economic zone

Duqm - الدقم :

His Excellency Qais Mohammed Al Yousef, Minister of Commerce, Industry and Investment Promotion said that this Forum underscores the importance of Special Economic Zone at Duqm as a comprehensive and attractive zone for major industries. SEZAD, he added, is the largest economic zone in the Middle East with a size of 2000 square kilometers and it has been divided into several investment zones. He explained that in line with the Sultanate of Oman's goal to reach net zero emissions by 2050, an area was designated for the production of hydrogen and green industries, noting that the zone is characterized by several key factors for the production of green hydrogen; the field that is targeted by global industries.

Salim Al Aufi: The Forum provides opportunity to introduce the advantages of the zone in the field of green products

Duqm - الدقم :

His Excellency Eng. Salim Bin Nasser Al Aufi, Minister of Energy and Minerals, said that the Forum is an opportunity to bring the views of officials, project owners and investors closer, and to introduce the features and components of the Duqm Special Economic Zone, especially with regard to green products such as renewable energy and green hydrogen.

He added that the agreements and memorandums of Understanding signed during the Forum integrate with various green hydrogen production projects in the Sultanate of Oman, explaining that the beginning of next year will witness the official opening of the Duqm Refinery, which is one of the main projects in the SEZAD expected to attracting many related projects.

Dr. Ali Al Sunaidy highlights Duqm potentials to support green industry:

Duqm makes inroads into becoming investment and industrial center that promotes innovation

Shifting to new stages of energy production and green industries while achieving new dimensions of added value

Working towards achieving the goals of Oman Vision 2040 and fulfilling commitment to zero neutrality by 2050

Targeting large multinational projects specialized in modern production based on renewable energy

Duqm - الدقم :

H.E Dr. Ali Masoud Al Sunaidy, Chairman of the Public Authority for Special Economic Zones and Free Zones (OPAZ) confirmed that the Special Economic Zone at Duqm (SEZAD) is one of significant economic drives in Oman. Thereby, Duqm Economic Forum focused on the game-changing potential of Duqm – as a vibrant investment hub for new methods of manufacturing promoting innovation.

In his opening speech, Al Sunaidy said: «With relying on green energy generated from the sun and the wind that is available throughout the year, Duqm aims to move to new stages of energy production and green industries, which achieves new dimensions of added value and further corporate integration with economic zones, free zones and other industrial zones".

Al Sunaidy pointed out: "this Game-changing shift towards promoting green manufacturing will bring about a wealth of opportunities for innovation and investment in the production, transmission, transport, storage and export of green energy within the SEZAD and its surroundings. We are all working towards achieving the goals and ambitions of Oman Vision 2040 under the leadership of His Majesty Sultan Haitham bin Tarik and fulfilling the commitment towards zero neutrality by 2050."

Great opportunity to explore Duqm

Al Sunaidy explained that the Forum represented a good platform for participants whether investors, experts, specialists in modern production technologies and financial institutions to exchange knowledge, experiences and ideas. It offered a great opportunity to explore the possibilities of this economic zone directly, to find out about the available infrastructure facilities and get to know its qualified team and the business support system that it provides through the one-stop shop.

He added: «The Forum not only focuses on attracting more large multinational projects, especially in the means of modern production based on renewable energy, but also focuses on targeted dialogues to find common convictions on the best ways to localize quality projects that provide raw materials and pro-

duction inputs to local factories and for export using environmentally friendly models. It also aims to identify promising markets, strengthen production chains, raise storage efficiency, develop export facilities and service crossings. In addition, the Forum looks into attracting startups to establish and grow their businesses in the Duqm Special Economic Zone and other zones spread across the country, thereby creating more sustainable job opportunities for competent Omani youth."

Great opportunities available

Al Sunaidy clarified that besides the already licensed green ammonia and green hydrogen projects within the zone, the government has allocated thousands of kilometres for renewables most of which are within Al Wusta Governorate, adjacent to the Zone. "It is very easy to connect to Duqm liquid storages and export jetties at the Port of Duqm and Ras Markaz. The fully serviced land near the port with the gas station and the substation made it all possible for future steel and other metal manufacturers to plan for their projects to utilise gas and blue hydrogen and then to shift swiftly to the use of renewables and green hydrogen".

Flexible future projects

His Excellency Dr. Ali bin Masoud Al Sunaidy invited international companies to invest in the Special Economic Zone at Duqm, displaying advantages and modernization of Duqm comprehensive plan which can provide flexibility required for future projects.

He said: «When renewable energy and green hydrogen become available in Duqm, other industries will flourish. We invite global partners from factories engaged in activities related the manufacture of spare parts and steel structures for appliances, electrical equipment, automobiles and the shipbuilding industry to seek investments opportunities in the SEZAD, and this, in turn, will stimulate the growth of other companies along the production chains in the free zones and other industrial areas across the Sultanate of Oman. Consequently, this will provide opportunities for small and medium-sized enterprises and high-quality long-term jobs for our youth, not only in the metallurgical industries, but also in the fish, logistics, data storage sectors, as well as the chemical industry".

Al Sunaidy expressed his hope that the first edition of Duqm Economic Forum will achieve positive results, pointing out that Duqm provides the scope for many new strategic partnerships because it not only leverages from the rich possibilities provided by the SEZAD, but also from the stable and secure environment of the Sultanate of Oman, the stable and encouraging regulatory framework for attracting business, and the track record of successes in partnership between the private and public, local and foreign sectors in the free zones in Salalah, Sohar, Rusay and other industrial areas across the country.

Creating meaningful dialogues on the best ways to localize quality projects built on the production of environmentally friendly models

The government allocates thousands of kilometers along Duqm for renewable energy projects to produce hydrogen

to connect areas allocated for renewables in Duqm

Pact signed to establish Ras Markaz Road by Omani-Saudi coalition

Duqm - الدقم :

Several investment agreements and memoranda of understanding (MoUs) were signed in the green industries sector, within the Duqm Economic Forum. Through an Omani-Saudi cooperation, a contract was signed for the implementation of a dual-carriageway project from Duqm Airport roundabout to Ras Markaz to be funded by the Saudi Fund for Development (SFD). The length of the road is 51 kilometers with a cost of OR 57.6 million. It is one of the important roads to connect factories in the areas allocated for renewable energy in Duqm. The Omani-Saudi coalition comprises of Strabag Oman and AlRosan Company. Preliminary preparatory works have begun, and it is expected to be completed in the second half of 2025.

The contract was signed by H.E. Dr. Ali bin Masoud Al Sunaidy, Chairman of OPAZ, and Hamid bin Abdulqawi Al Yafei, Executive Director of Strabag Oman, authorized by the Chairman of the Board of Directors. The signing ceremony was attended by H.E. Eng. Bandar bin Abdullah al Obaid, Director General of Arab Countries Operations at the Saudi Fund for Development.

The Omani and Saudi parties expressed their happiness with the signing of this contract. Hamid bin Abdulqawi Al Yafei, Executive Director of Strabag Oman, and Mohammed Hazza Abu al-Rus, Vice Chairman of AlRosan Contracting Company, identified the importance of partnership and cooperation between Omani and Saudi companies that receive the attention of the governments of the two countries. They confirmed that they are looking forward to implementing other projects related to the development of infrastructure within the Special Economic Zone at Duqm and in other areas in the Sultanate of Oman.

Signing pacts and MoUs for 5 green industries projects in Duqm

Usufruct agreement with Hyport Duqm consortium

Allocating 150 square km of land in SEZAD

The project is to generate green energy through solar and wind energy resources and convert them into hydrogen derivatives such as ammonia and other by-products

The consortium includes OQ Alternative Energy Company and DEME Concessions of Belgium

MoU with bp to set up a plant for green hydrogen derivatives in Duqm

- An ammonia plant to be set up
- It is planned to export 150k tons of green hydrogen annually
- The company will produce 3.3 GW of electricity

MoU with Shell Oman for decarbonization

- Supporting low-carbon investment in Oman
- Conduction of a study on supply and demand on energy
- Preparation of a key plan to explore investment potentials in the sector

MoU with Posco-Engie consortium

- Development of the green ammonia project with a capacity of 1.2 million tons per year
- Allocating a land in the SEZAD for a green ammonia production
- The consortium includes a group of Korean and French companies

Three pacts with Vulcan Green Steel

- Volume of investments is $3 billion
- The production capacity is 5 million tons
- The establishment of a green steel factory in Duqm

To enhance the leading role of SEZAD in the sector

Agreements and MoUs signed for 5 green industries projects in Duqm

Duqm - الدقم :

In enhancement of the Duqm Special Economic Zone's potentials, the Duqm Economic Forum witnessed the signing of a number of agreements and memorandums of understanding (MoUs) for 5 projects in the green industries sector in the SEZAD, which confirms the leading role of the zone in attracting green industries projects and enhancing related investments in Duqm.

The agreements and MOUs encompassed major projects in the renewable energy, green hydrogen, green ammonia production and green iron production sectors, and are projected to support economic diversification efforts and achieve Oman Vision 2040 goals in the field of zero neutrality.

The agreements projected to support economic diversification efforts and achieve Oman Vision 2040 goals in the field of zero neutrality

Within its plan to export 150K tons of green hydrogen annually

bp to establish factory for production and export of ammonia in Duqm

Duqm - الدقم :

The Special Economic Zone at Duqm (SEZAD) signed a MoU with bp Oman to establish a factory for the production of green hydrogen derivatives, with a capacity of 3.3 gigawatts of electricity and to establish an ammonia factory which produces 150,000 tons of green hydrogen annually. The memorandum of Understanding stipulates exploring cooperative opportunities on carbon neutrality through the technologies used in this aspect. It was signed by Eng. Ahmed bin Ali Akaak is the Acting CEO of SEZAD and Eng. Yousef al Ojaili, Chairman of bp Oman.

Shell Oman to produce blue low-carbon hydrogen

Duqm - الدقم :

The Special Economic Zone at Duqm, the Port of Duqm Company and Shell Development Oman (Shell Oman) signed a Memorandum of Understanding (MoU) to explore opportunities available in the field of blue hydrogen and decarbonization.

The pact stipulates that Shell Oman to prepare a master plan to explore possible investment areas in the energy sector in the SEZAD in line with Oman's plans for zero neutrality by 2050 and Oman Vision 2040. Eng. Ahmed bin Ali Akaak is the Acting CEO of SEZAD, Reggy Vermeulen, CEO of Port of Duqm, and Walid Hadi, Country Chair of Shell Oman, signed the MoU. As per the agreement, Shell Oman is to conduct studies on energy supply and demand, infrastructure development needs, carbon footprint impact, and decarbonization strategies. On the occasion, Walid Hadi, Country Chair of Shell Oman said: "We are excited to be part of the development of decarbonization opportunities in Duqm. Since we are the main developer of the consortium of Green Energy Oman (GEO) project and the blue hydrogen (Low Carbon) Project, we believe that the blue and green hydrogen fields are important pillars that reinforce each other and contribute to supporting low carbon investment in the Sultanate of Oman and pave the way towards diversifying the energy economy.

Posco-Engie: MoU to allocate land for ammonia factory

Duqm - الدقم :

The Special Economic Zone at Duqm signed a Memorandum of Understanding (MoU) with the Posco-Engie consortium , encompassing a number of Korean and French companies, with the aim of allocating a land in the Special Economic Zone at Duqm to establish a factory for the production of green ammonia. The consortium earlier signed an agreement with the Oman Hydrogen Company «Hydrom» for a project to produce about 200 tons per annum of green hydrogen equivalent to 5.2 GW of renewable energy for the purpose of ammonia production and export.

The MoU provided for cooperation on the allocation of land in the SEZAD to establish an ammonia production plant, with Posco-Engie leading the consortium to develop a green ammonia project with a capacity of up to 1.2 million tons per year. The pact was signed by Ahmed bin Ali Akaak is the Acting CEO of SEZAD, Jeong-woo Choi Vice President of Posco, and Heren Park, Vice President of Hydrogen for Asia, Middle East and Africa at Engie.

Usufruct agreement signed with Hyport Duqm to utilize a 150 square kilometer area

Duqm - الدقم :

The Public Authority for Special Economic Zones and Free Zones (OPAZ) signed an usufruct agreement with Hyport Duqm consortium, a joint venture between OQ Alternative Energy Company and DEME Concessions of Belgium. Hydrogen Oman (Hydrom) took part in the agreement as the competent authority for green hydrogen projects in the Sultanate of Oman.

The pact was signed by H.E. Dr. Ali bin Masoud Al Sunaidy, Chairman of OPAZ on behalf of the Authority, H.E. Salim bin Nasser Al Aufi, Minister of Energy and Minerals, Chairman of the Board of Directors of Hydrom, on behalf of the company, Ghalib bin Said Al Maamari , Vice President Low Carbon Molecules at OQ Alternative Energy and Giuseppe Stefani, General Manager of DEME Concessions, both on belhalf of Duqm Hyport.

According to the usufruct agreement, a land of 150 square kilometer area was allocated in Duqm Special Economic Zone to Duqm Hyport with the aim of generating green energy through solar and wind energy resources for the development of green hydrogen and green ammonia.

According to Duqm Hyport, the agreement paves the way for the development of the first and second phases of the project on an area of 150 square kilometers, explaining that the project is designed to produce wind and solar energy with a combined renewable energy capacity of about 1.3 gigawatts for the first phase and about more than 2.7 gigawatts in the second phase. The agreement also allows completion of the steps required for the project, such as detailed engineering and construction studies. The first phase of the project is expected to produce about 330 thousand metric tons of green ammonia, increasing to more than 650 thousand metric tons in the second phase.

Ghalib bin Said Al Maamari, Vice President Low Carbon Molecules at OQ Alternative Energy, said: “We are pleased to sign two usufruct agreements for the Duqm hyport project, which will enable us to develop the project at the site allocated in the Duqm Special Economic Zone. This step reflects the commitment of the OQ Group to the implementation of its decarbonization plans, and embodies the energy transition strategy adopted by OQ to contribute to reaching zero carbon neutrality by 2050”

For its part, Giuseppe Stefani, General Manager of DEME Concessions, commented: “After nearly 3 years of joint cooperation with our partner OQ Group, we are pleased to accelerate transition towards a green hydrogen-powered future and support Oman's ambitious green energy goals, while strengthening DEME's presence as a strategic partner in Oman. The project will harness the enormous potential of hydrogen as a clean and versatile energy carrier, leveraging Oman's strategic location and abundant renewable resources to create a robust green hydrogen ecosystem that drives Oman's economic growth while reducing global carbon emissions.”

The project aims to generate green energy through solar and wind energy resources

Production of more than 650 thousand metric tons of green ammonia by the end of the second phase

Ghalib Al Maamari: the pact reflects OQ Gropu’s commitment to its decarbonization plans

Giuseppe Stefani: we are delighted to accelerate transition towards a green hydrogen-powered future

Vulcan Green Steel invests 3 billion dollars to establish factory for green steel

Target production volume is about 5 million tons per year

Reducing carbon emissions in steel production - accelerate transition to green technologies

Duqm - الدقم :

Vulcan Green Steel, a project by Jindal Steel Group, partnered with Oman to make a shift in the global steel industry and accelerate the transition to green technologies with investments of about USD 3 billion. This cooperation includes three key agreements signed between Vulcan Green Steel Company, OPAZ and the Port of Duqm company.

The first agreement strengthens a 30-year partnership between Vulcan Green Steel and OPAZ to establish and operate a state-of-the-art iron and steel plant in the industrial zone of the Port of Duqm with a target production volume of about 5 million tons per year of green steel.

The second agreement focuses on reducing carbon emissions in steel production. Vulcan Green Steel plans to use renewable energy in its mine-to-end-product strategy to manufacture low-emission steel by the end of the decade. By leveraging advanced technology and innovative practices, the company aims to reduce carbon emissions by at least 85% compared to traditional iron and steel manufacturing processes.

The third agreement emphasizes the economic benefits of the partnership which is expected to generate direct and indirect job opportunities in the SEZAD and to stimulate local economy.

The agreements were signed by H.E. Eng. Ahmed bin Hassan Al Dheeb, Deputy Chairman of OPAZ, Reggy Vermeulen, CEO of the Port of Duqm company, and Mark Bula, CEO of Vulcan Green Steel.

witnessed extensive discussions over two days and 5 sessions

Duqm Economic Forum participants affirm Duqm's role in leading change in green industries

Duqm - الدقم :

Participants at the Duqm Economic Forum stressed the pivotal role expected to be played by the Special Economic Zone at Duqm (SEZAD) in driving change in the green industries sector. They pointed out that Duqm has all the enablers to make a fundamental change in this sector.

Throughout two days and five sessions, the Forum discussed the future of green industries in (SEZAD) and its growth prospects with the participation of decision makers in companies investing in the zone, officials from green hydrogen, transport and energy sectors in the Sultanate of Oman, CEOs of international companies specializing in the sector and many local and international experts.

Within the Forum, international and local companies investing in the SEZAD, such as Vale, Vulcan Green Steel, DEME, OQ Group, MARAFIQ Company and the Port of Duqm Company, showcased their visions on the projects they are implementing in the Special Economic Zone at Duqm and their strategies in the field of green industries. They also discussed the anticipated challenges, stressing the need to enhance integration in the activities of green industries with other economic and investment sectors in the zone. Hydrogen Oman «Hydrom» also presented its vision for the development of green hydrogen industry in the Sultanate of Oman and its efforts in this field.

Supporting demand

The Forum, which was attended by about 300 local and international figures, witnessed the presentation of many visions aimed at supporting efforts exerted in the sectors of green industry like renewable energy supplies, sustainability goals, the anticipated demand for green materials, and practical solutions provided by green hydrogen in Duqm for heavy industries to decarbonize and promote the industry towards a more sustainable future.

The Forum looked into the causes behind Oman's renewable economic power in the future and the role played by Duqm in positioning the Sultanate of Oman as a global producer and exporter of zero-carbon fuels in international markets, which gives the Sultanate a competitive advantage in the field of green energy.

Development of new industries

Particular focus was given to the development of a large-scale green steel industry cluster in Duqm, the role of the refineries and petrochemicals sector in promoting green energy activities, the downstream opportunities this will create in the manufacturing of solar panels wind turbines , and the global demand on these products.

Multipurpose economic center

The Forum stressed the pivotal role of the Special Economic Zone at Duqm in the supply chain and the many potentials of Duqm as a multi-purpose economic, commercial and industrial center and a major hub for global trade flows and energy distribution. Participants touched upon the potential of the Port of Duqm in stimulating investment in the green industries sector, and favorable opportunities for transportation, maritime navigation and freight companies in the Zone.

Positioning Oman's as a global producer and exporter of carbon-free fuels

Ahmed Al Dheeb: The discussion sessions clearly revealed the role of Duqm as change leader in renewable energy sources

Duqm - الدقم :

H.E Eng. Ahmed Hassan Al Dheeb, Deputy Chairman of the Public Authority for Special Economic Zones and Free Zones (OPAZ), confirmed that the Forum contributed to building bridges of cooperation with international companies to establish economic partnerships supporting efforts to develop the green industries, reduce emissions and to decarbonize.

In his closing remarks, Al Dheeb added: "The two-day discussion sessions clearly revealed Duqm's role in driving change in renewable energy sources, manufacturing, global trade flows and many other topics. The Forum served as a window on the possibilities of the Special Economic Zone at Duqm and its exceptional attractiveness as an investment destination full of distinguished competitive investment opportunities"

Al Dheeb also highlighted the game-changing potential of Omani economy and its immense investment schemes, indicating the dynamic role expected by the SEZAD in fulfilling objectives of Oman Vision 2040. He confirmed that Duqm is the most attractive for trade, industry, innovation and the gateway to global trade.

Emphasis on supporting efforts to increase renewable energy supply and global demand

Speakers:

- Mark Bula - CEO, Vulcan Green Steel
- Kristof Waterschoot- MD, Port of Antwerp-Bruges International
- Richard Scott - Vice President for Green Hydrogen and Ammonia Development, ACME Group
- Rogerio Nogueira - Global Marketing Director, Vale
- Naota Furihata - GM, Low Carbon Metallics, Mitsui
- Yousuf Al Ojaili- President, BP Oman

Panal 1

Duqm Renewables Powering

Moderator
HH Sayyid Dr. Adham Al Said
Founder & MD, The Firm

Speakers:

- AbdulAziz Al Shidhani - MD, Hydrom
- Tom Clarke - GM Commercial, Oman Shell
- Steven Bouckaert - GM, DEME Concessions NV
- Reggy Vermeulen - CEO, Port of Duqm
- Ghalib Al Maamari - Vice President Low Carbon Molecules at OQ Alternative Energy

Panal 2

Duqm's Green Energy Advantage

Moderator
Dr. Firas Al Abduwani
Director General,
Ministry of Energy & Minerals

Speakers:

- John Mullins - Executive Chairman, Amarenco
- Dr. Marc Hamed- CEO, EuroGulf Tech
- Mr. Siddharth Malik - CEO, Vulcan Green Energy
- Eng. Abdullah Al Saeedi - Founding Partner, Nafath Renewable Energy

Panal 3

Duqm's Downstream Green Pull

Moderator
Rumaitha Al Busaidi
Business Development,
Hydrom

Renewable energy is an essential for the development of green steel industry

Green hydrogen provides practical solutions for heavy industries to move towards decarbonization and sustainability

Panal 4

Opportunity in Supply Chain

Moderator
HH Sayyid Dr. Adham Al Said
Founder & MD, The Firm

Speakers:

- H.E. Eng. Khamis Al Shamakhi - Undersecretary, Ministry of Transport, Communications & Information Technology
- Omar Al Mahrizi - CEO, Sohar Free Zone
- Abdullah Al Hashimi - MD, Marafiq
- Christopher Cook - MD, Maersk Oman, UAE & Qatar
- Ard Van Hoof - MD, OTTCO

Panal 5

New Era for Petrochemicals

Moderator
Faiza Al Harthi
Head of Environment and Natural Resource Oman Vision 2040 Implementation and Follow Up Unit

Speakers:

- Dr. Ihsan Ali Bu Hulaiga - Founder, Joatha Consulting
- David Bird - CEO, OQ8
- Mazin Al Lamki - CEO, Energy Development Oman
- Shayan Sumar - Operations Director, Apex Transgulf Manufacturing

The Forum reviews Duqm's role in supply chain and the Port of Duqm's potential in stimulating investment in green industries

Duqm leads green industries forward

Duqm - الدقم :

Taking advantage of solar and wind power in the implementation of renewable energy projects has been one of the directions of the Sultanate of Oman since an early stage. The» Miraah « solar energy project, which began operations in 2015, is one of the most prominent projects that have been implemented in the past years in this sector. The project, built by PDO in conjunction with GlassPoint Solar, is the largest solar steam generating stations in the world with a capacity of 1021 MW thermal.

A number of other projects in the renewable energy sector were carried out such as: Dhofar Wind Power Project in 2019 with a capacity of 50 MW, PDO Amin Solar PV Plant in 2020 with a capacity of 100 MW, Ibri Solar Power Plant with a production capacity of up to 500 MW, and Manah Solar Power Plant (I and II) with a total production capacity of up to 500 MW.

Chronology of the most prominent stations in the green industries sector

2022

October 11: The Sultanate of Oman set the year 2050 as a date to achieve zero carbon neutrality.

September 27: OPAZ signed a land reservation agreement for the Duqm Hyport project to produce green hydrogen in the Duqm Special Economic Zone, a joint venture in the alternative energy sector between OQ and the Belgian DEME Group.

October 23: Hydrogen Oman Company «Hydrom» was established. It is independent, fully owned by Energy Development Oman (EDO) and regulated by the Ministry of Energy and Minerals (MEM).

August 23: OPAZ signed a land reservation agreement with the Indian Company ACME for the green hydrogen and ammonia project in the Special Economic Zone at Duqm.

December 4: Jindal Shadeed Group announced selection of the Duqm Special Economic Zone to establish the largest of its kind plant to produce green iron through the use of renewable energy sources and green hydrogen in manufacturing processes.

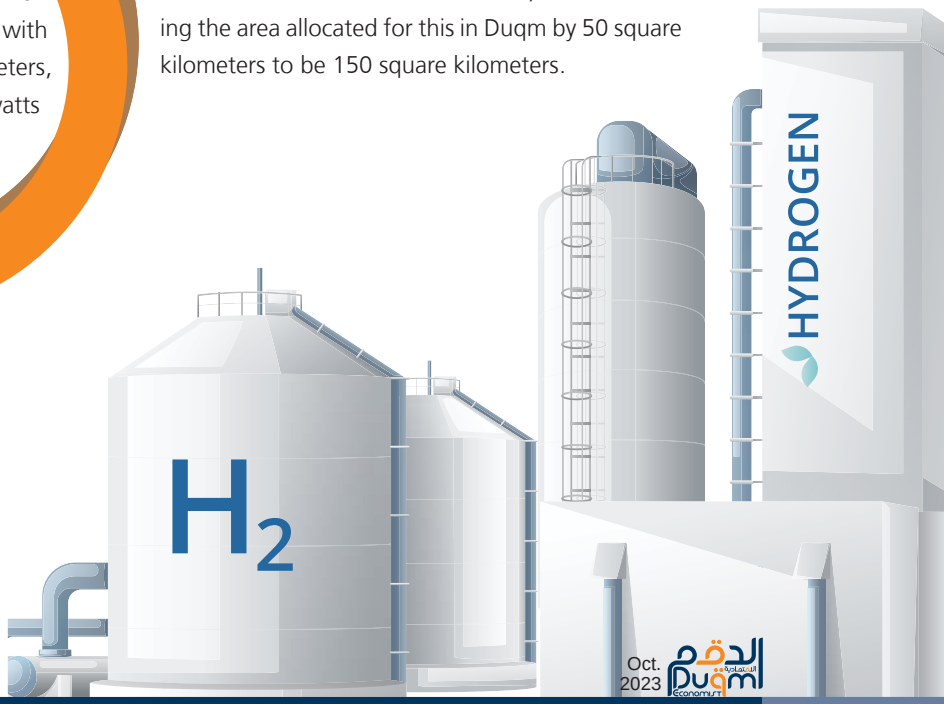
2021

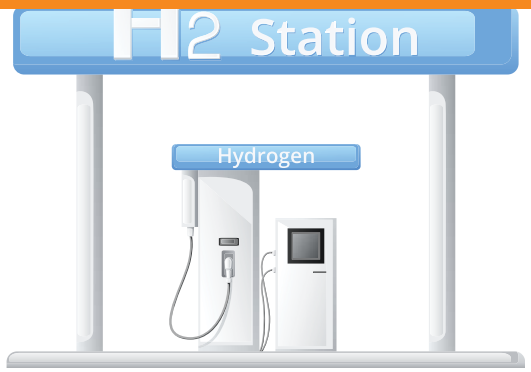
December 9: OPAZ's Board of Directors approved the mechanism of attracting clean energy production projects for local use and green hydrogen production for export purposes in both Duqm Special Economic Zone and Sohar free zone, while increasing the area allocated for this in Duqm by 50 square kilometers to be 150 square kilometers.

November 16: OPAZ announced the allocation of a clean energy zone in SEZAD with an area of 100 square kilometers, to generate about 10 gigawatts of electric power.

2020

November 16: International companies showed interest in investing in green hydrogen projects in OPAZ





August 16: Reception of the world's first liquefied hydrogen tanker through Sultan Qaboos port.

June 21: Signing two agreements for the development of two new green hydrogen production projects in Al Wusta Governorate with Bosco-Engie and Hyport Duqm with a total investment value of about 10 billion US dollars.

June 3: Signing of 3 agreements for the development of green hydrogen projects in Duqm with the consortia of Amnah, Green Energy Oman (GEO) and BP Oman, with investments estimated at 20 billion US dollars.

June 21: Launch of the second round of public tenders for green hydrogen zones through 3 investment opportunities in Dhofar governorate.

2023

May 12: The Sultanate of Oman presented a visual presentation on the green hydrogen strategy at the World Hydrogen Summit held in Rotterdam, Kingdom of Netherland.

February 16: Royal Decree No. 10/2023 was issued to allocate some lands for the purposes of renewable energy and clean hydrogen projects.

May 22: Vale Company signed a land reservation agreement with the Port of Duqm Company to establish an integrated industrial complex for green iron in SEZAD on an area estimated at 6.7 square kilometers

May 9: Signing of the green hydrogen certification pilot project agreement for the Duqm Hyport project between the Ministry of Energy and Minerals and the Belgian Ministry of Energy.

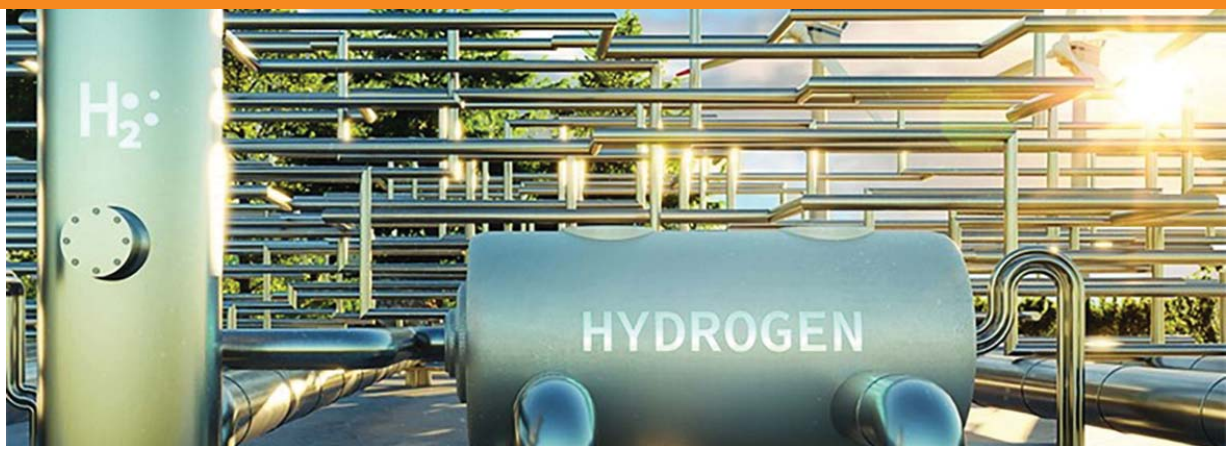
March 14: Binding commercial terms agreements for the green hydrogen were signed with developers from Belgium, Netherland, Kuwait, the UAE, the United Kingdom, Japan, Singapore, Germany, India and the Sultanate of Oman. These agreements included the commercial terms of the contract for a period of 47 years, including 7 years for the development and construction of projects and 40 years for operation.

Expanding benefit from renewable energy potential to enable the growth of green industries

Relentless efforts to support Oman's plan of zero neutrality and decarbonization of the steel sector

Providing a fertile ground for the success of projects .. many facilities for investment

Duqm clean energy zone has the capacity to generate about 10 GW of electric power



Expansion of the use of renewable energy

With the success of these projects, the Sultanate of Oman's potentials in the field of solar and wind power were more highlighted. Also, expanding the use of renewable energy in industrial projects has become of more importance.

Since the second half of 2020, many international companies have expressed interest in investing in the green hydrogen sector in special economic zones and free zones, which prompted OPAZ to announce, in November 2020, the allocation of a clean energy zone in the SEZAD with an area of 100 square kilometers, enough to generate about 10 gigawatts of electric power.

Before the end of 2020, OPAZ's Board of Directors approved a mechanism to attract clean energy production projects for local use and green hydrogen production for export purposes in both the SEZAD and the Sohar Free Zone, with an increase in the area allocated for this in Duqm by 50 square kilometers to be 150 square kilometers.

Agreements for green hydrogen projects

Reflecting the level of interest in the sector, a number of agreements were signed. In August 2021, OPAZ signed a land reservation agreement with the Indian Company ACME to establish Green Hydrogen and Ammonia Project at the Special Economic Zone at Duqm. In September of the same year, OPAZ also signed a similar agreement for Duqm Hyport project to produce green hydrogen, a joint venture in the alternative energy sector between OQ and the Belgian DEME Group. Over the past period, the two companies conducted field experiments and surveys on the potential of Duqm to generate renewable power for green hydrogen projects.

Green industries gain momentum

Green industries has been receiving more attention with the Sultanate of Oman announcing in October 2022 to set the year 2050 as a date to achieve zero carbon neutrality. That was followed by the establishment of the Oman Hydrogen Company «Hydrom» to take over the supervision of the sector. In February 2023, the Royal Decree No. 10/2023 was issued to allocate some lands for renewable energy and clean hydrogen projects.

In light of this interest, the Special Economic Zone at Duqm has begun to view green industries as a promising economic sector that can be developed in parallel with other heavy and medium industry projects experiencing growth in the zone. Besides, development of the green industries sector in SEZAD will encourage many companies to establish factories to manufacture the required parts for renewable energy projects, including solar panels and wind turbines. This was discussed in one of the specialized sessions within the Duqm Economic Forum hosted by the zone on October 16 and 17, 2023.

Duqm has promising potential

The Special Economic Zone at Duqm has enormous potential for the success of green industries such as sun and wind to produce renewable energy, and vast lands to implement industrial projects. Duqm also has the infrastructure for export through the Port of Duqm, in addition to the facilities and incentives provided to investors.

Green iron projects

Among the strategic investments that SEZAD attracted in the green industries sector are Jindal Shadeed Group's Green Iron Project and Vale Green Iron Production Complex. The first project is the Green Iron Production Plant, which Jindal Group has started implementing through its subsidiary Vulcan Green Steel. The investment of the project is estimated at about 3 billion US dollars, and it will benefit from renewable energy sources and green hydrogen in manufacturing processes. The ground-breaking project will be built on an area of about 2 square kilometers in the Port of Duqm's scheme.

The second project is the integrated Green Iron Production Complex, which Vale Company intends to implement in the Special Economic Zone at Duqm on an area of 6.7 square kilometers. The Complex includes three plants described in ore concentration, green briquetting, and reduced iron. It focuses on securing supplies to local and foreign markets with high-quality green iron products as part of efforts to decarbonize the steel sector.

The third project encompasses the establishment of a plant for reduced iron production by the two Japanese companies; Kobe Steel and Mitsui & Co.

The project is expected to produce five million tonnes of Direct Reduced Iron (DRI) annually through the MIDREX® Process. By using technically and commercially proven production method, Kobe Steel and Mitsui aim to provide a near-term decarbonisation solution to the steelmaking industry. In the long run, the project will aim for further decarbonisation through measures such as replacement of natural gas with hydrogen and carbon capture, utilisation and storage, with a goal to expand production capacity as well.

Thus, the Duqm Special Economic Zone keeps pace with the Sultanate of Oman's approach to expand the production of renewable energy and employ it in the development of green industries, driving the sector successfully towards prosperity and growth.

Oman Receives World's First Liquefied Hydrogen Vessel

Musacat - الدقم Dugm:

The Sultanate of Oman received at Sultan Qaboos Port the first liquefied hydrogen carrier ship "Suiso Frontier" as part of the Japanese tanker's regional tour in the Middle East.

H.E Eng. Salim Nasser Al Aufi, Minister of Energy and Minerals alongside officials from the sectors of hydrogen, transport and logistics, toured the carrier ship's facilities. They also toured the hydrogen transfer control room, which was notably augmented with cutting-edge reality technology. This innovative feature displayed the scenarios of transporting liquefied hydrogen on a commercial scale, besides the economic feasibility of transport projects.

Al Aufi said that the visit comes within the framework of getting familiarized with the capabilities of transporting hydrogen and the challenges faced by the carrier. The visit also aims to review the company's future plans in building huge hydrogen carriers to meet increasing international demand during the upcoming stage.

Technical transportation standards

Moreover, the carrier ship «Suiso Frontier» was manufactured by the Japanese company Kawasaki Heavy Industries and it is operated by Shell Japan.

Liquefied hydrogen is transported according to specific technical standards at temperatures up to minus 253 degrees Celsius. The ship successfully transported the first cargo of liquefied hydrogen from Australia to Japan in February 2022.

The ship is considered a significant experimental station, notably catalyzing research and development in the hydrogen domain. Suiso Frontier ferries substantial hydrogen volumes, with cargo capacity reaching 1,250 cubic meters. The financial expenditure in the construction of this ship has been appraised at approximately USD 359 million.

Japan stands as a key strategic partner to the Sultanate of Oman, particularly in the energy domain. This strategic partnership was solidified through the signing of a Memorandum of Cooperation in January 2023. This collaboration between Oman and Japan encompasses a spectrum of sectors, including hydrogen, ammonia fuel, carbon recycling, and modern methodologies sued in methane production.

Cargo capacity of the carrier reach 1,250 cubic meters

Liquefied hydrogen transported at temperatures up to minus 253 degrees Celsius

Green Hydrogen Ports… a giant step towards clean energy

Green hydrogen is a term that refers to hydrogen as a light and highly reactive universal fuel, produced through a chemical process known as electrolysis. This method uses an electrical current to separate the hydrogen from the oxygen in water.

Since electricity can be generated from renewable sources, this means that it is possible to produce a clean energy source that does not emit carbon dioxide into the atmosphere, knowing that green hydrogen does not emit polluting gases either during production or combustion.

Amid the escalating concerns about climate change and the world reaching unprecedented levels of rising temperatures, imposing a global trend to reduce carbon dioxide emissions, green hydrogen can provide up to 25% of the world's energy needs by 2050 and become one of the main hubs of energy production in the world with investments estimated at about 10 trillion dollars by 2050.

Green hydrogen cities

Currently, the world is moving towards the use of green hydrogen in various fields such as electric vehicles powered by hydrogen fuel cells. It is also used in hydrogen-powered electricity generating turbines to generate electricity at peak times in order to stabilize the supply in the electricity grid. Besides, it is used for industrial purposes such as in green steel plants that use hydrogen as a heat source instead of coal.

Guangyang industrial city in South Korea is an important model of global trends towards achieving a green hydrogen city, with the aim of establishing an integrated ecosystem for the production, storage, transportation and consumption of clean fuels based on green hydrogen as an energy source in homes, enterprises, factories, schools, universities and transport systems. This is done by converting cars, buses and trucks to hydrogen transportation methods powered by that clean fuel.

Maritime transport and greenhouse gas emissions

The global shipping industry is one of the most energy-intensive modes of transport in the world with values equivalent to five times that of other modes of transportation of goods. This industry relies on fossil fuels almost completely; it produces emissions of about 940 million tonnes of carbon dioxide annually, according to statistics by the International Maritime Organization.

Thus, the global shipping industry directly accounts for about 3% of total global greenhouse gas emissions, and this percentage is expected to increase to 10% by 2050 if measures are not taken to rectify the situation.

Green hydrogen as a fuel for powering ships

Scientific reports indicate that the drive of many countries and major shipping companies in the world towards the use of green hydrogen as a source of energy needed to operate ships will allow the global maritime transport sector to get rid of 80% of its carbon emissions by 2050, so that marine vessels - which are a heavy fuel consumer on their voyages roaming the seas and oceans around the world - will be powered by green hydrogen.

Therefore, as part of the global drive to use green hydrogen as an environment-friendly fuel to operate ships, the shipbuilding yards constructed the world's first carbon-neutral passenger ferry vessel powered by hydrogen fuel cells, The Sea Change, which is scheduled to operate in the Gulf of California in the United States.

In April 2022, the first international maritime transport of liquefied hydrogen was carried out at the Kobe LH2 plant in Japan. The ship made a 9,000 km journey between Australia and Japan.

Within the same global direction, the shipping giant AP Moller-Maersk will be at the forefront of the leading global companies in the use of green hydrogen as a fuel. It contracted with the Korean shipbuilding company, Hyundai, to build 12 container ships powered by methanol fuel. This will reduce the annual emissions of carbon dioxide from its ships by 1.5 million tonnes when dozens of new ships, the company will deliver during 2024 and 2025, become operational.

The European experience

According to the Re-PowerEU Europe energy restructuring plan, the seaport infrastructure will be developed to increase the demand for renewable hydrogen in Europe to 20 million tonnes per year in 2030. It is planned to produce 10 million tonnes of renewable hydrogen in the EU and 10 million tonnes of renewable hydrogen imports by 2030.

In this context, a detailed study of the potential demand and supply of hydrogen at European ports in 2030, 2040 and 2050 was prepared, along with a study on the infrastructure of the hydrogen supply chain and an investment roadmap that includes the roles that the port can play in the future of hydrogen economy in Europe.

Dr. Ayman Al Nahrawi

Professor, Expert of International Economics & Logistics

The Economic Adviser to the Arab Sea Ports Federation

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The annual demand for hydrogen across the EU is expected to increase to 53 million tonnes (or 1.764 TWh). The study estimated that 42% (22 million tonnes , or 730 TWh) of the total hydrogen demand in the EU in 2050 will be located in Seaport areas.

Green hydrogen production at seaports

In northern Europe, the North Sea ports, the port of Antwerp-Bruges and the port of Ostend, have been recognised as "«Hydrogen Valley» at the European level due to the fact that this geographical area has a complete value chain for hydrogen from production, distribution, storage and local end-use in various sectors, including the mentioned seaports.

These three ports have integrated activities, combining industrial clusters of iron, steel and chemical products with offshore renewable energy production centers. Due to their geographical location, they serve as a gateway to a European network of inland waterways, railways, pipelines and road links. Seaports have unique potentials in this regard, as up to 42% (22 million tonnes, or 730 TWh) of the total hydrogen demand in the EU in 2050 could be placed in Seaport areas.

With respect to the production and use of green hydrogen in seaports, the Japanese company Mitsui has partnered with RWE, the largest power generation company in the UK, and the Port of Tilbury – London to establish a green hydrogen plant with a capacity of 10 MW, gradually developing over the next ten years up to 100 MW, within the innovative hydrogen project at the Port whose vision is to achieve zero carbon by 2042.

In this context, the Rotterdam Port Authority also announced that it is developing an 11-hectare site in the Maasvlakte area to build a large green hydrogen plant, with a capacity of 2 GW and is expected to be completed around 2028. Hydrogen production directly on the coast helps to avoid additional loading on the high voltage network, according to the Rotterdam Port Authority, which aspires to achieve 2 to 2.5 GW of electrolysis by 2030.

The Port of Valencia in Spain is the first seaport in the world to use green hydrogen-powered 4×4 tractor trucks to transport containers within its terminals, a major step within the framework of the Valencia Port Authority's roadmap to achieve zero emissions targets by 2030.

The practical tests for operation were carried out under the supervision of the team of inspectors of the European H2-PORTS project. The tractor powered by the green hydrogen demonstrated its reliability and strength in trial operation with various loads of cargo on board the trailer.

Green hydrogen in the Sultanate of Oman

Oman has ambitious plans to produce green hydrogen with the aim of increasing the contribution of clean energy to the national electricity grid mix to 30% by 2030 and to about 39% by 2040 as part of its plans to achieve carbon neutrality.

The green hydrogen production in Oman requires a huge volume of electricity from renewable energy up to 50 TWh to achieve this goal by 2030.

The International Energy Agency estimates that Oman will be the sixth largest exporter of green hydrogen in the world, and the largest in the Middle East by 2030, if the hydrogen production roadmap is implemented on track.

One of the important projects in the Sultanate of Oman at the moment is the «Duqm Hyport» for the production of green hydrogen, which is a strategic project in partnership with OQ and the Belgian «DEME» group. The project is scheduled to be established on a part of the alternative energy zone in the Special Economic Zone at Duqm (SEZAD) on an area of about 150 square kilometres.

A wind power plant and a solar power plant with a combined capacity of 1.3 GW will be established across expandable stages. Currently, the installation and operation of 4 meteorological wind turbines and two solar meteorological stations inside the site were completed; to ensure the promising and outstanding potentials of Duqm throughout the year in the field of solar and wind energy generation. The next step will be establishing a plant for the production of green hydrogen and green ammonia.

The production and export of green hydrogen in the ports of the Sultanate of Oman aims to leverage the distinguished geographical location of the Omani seaports to provide more maritime and logistical services, foremost of which is supplying ships passing and frequenting the ports of the Arabian Gulf and the Arabian Sea with clean fuel.

Eng. Abdulaziz Al Shidhani, the General Manager of Hydrogen Oman (Hydrom), to الدقم Duqm Economist :

Our goal is for Oman to be a global green Hydrogen Hub

Muscat - الدقم Duqm Economist :

Eng. Abdulaziz bin Said Al Shidhani, the General Manager of Hydrogen Oman (Hydrom), stressed that the company is working to achieve many goals by encouraging investment in the green hydrogen sector, most prominent of which is solidifying the Sultanate of Oman's position in the field of green hydrogen industry and turning it into a global hydrogen center.

In an exclusive interview to Duqm Economist Magazine, he said that the Sultanate of Oman is already well-positioned on the global green hydrogen map, as the resources available for successful investment in the sector such as land, sun and wind are competitive. The Sultanate of Oman is characterized by its distinctive geographical location between East and West, its ports capable of providing logistical support to the sector, and it has a clear strategy to manage the sector. "The strategy follows the principle of public biddings on the opportunities available in the green hydrogen sector through fair and transparent procedures based on equality among all investors" he explained.

Al Shidhani talked about the status of the Special Economic Zone at Duqm (SEZAD) on the local green hydrogen map. He said: "Duqm - with all its components such as the port, solar energy resources, vast territory, geographical location and the regulations set by the Public Authority for Special Economic Zones and Free Zones (OPAZ) in the SEZAD -is qualified to be one of the most important infrastructures for the future of green hydrogen in the Sultanate of Oman. We expect that this sector is expected to witness investments of about US140 billion until 2050, and annual production to reach more than one million tons by 2030, with a gradual increase to reach about 8 million tons by 2050."

Eng. Eng. Abdulaziz bin Said Al Shidhani also touched upon many issues related to the sector, challenges and efforts. The full interview is below.

We have competitive resources for successful investment in the sector

Hydrom Company

Tell us about Hydrom Company and its objectives.

Oman Hydrogen (Hydrom) is an independent entity fully owned by Energy Development Oman (EDO) and regulated by Ministry of Energy and Minerals (MEM). Hydrom orchestrates the national interest in green hydrogen. Its main mandate is to master plan the sector, delineating government owned land areas, structuring associated large-scale green hydrogen projects, managing the process for their allocation to developers and overseeing their execution as well as facilitating the development of common infrastructure, connected ecosystem industries and hubs.

Hydrom was launched in 2022 following the Sultanate of Oman's strategy for green hydrogen announced in the same year. The strategy was prepared with the aim of regulating the green hydrogen sector and providing transparent information for investors. The company was established as part of the government's efforts to structure the sector, which called for finding an independent party to coordinate efforts between various entities in the Sultanate of Oman and be the face of the country in front of investors and the only direct point of contact with them.

The strategy Objectives

What are the key objectives of the strategy and its main pillars?

The strategy identified several pillars that

focus on available resources such as land, solar and wind potential, as well as the roles of various relevant entities like the Ministry of Energy and Minerals (MEM) as the regulator of the sector, and the Public Authority for Special Economic Zones and Free Zones (OPAZ), OQ Alternative Energy, and ASYAD Group, in addition to the role of Hydrom as the interface of investment in this sector.

The strategy has adopted the approach of public auctions with the aim of creating fair, transparent, equal procedures as well as equal opportunities for all investors. To achieve these goals, the company works through on 3 tracks, the first track is to offer opportunities for integrated green hydrogen projects that include the production of electricity from renewable sources, use it in hydrogen production, and then take advantage of hydrogen in other products, whether by utilizing it in industries or exporting it. The second track is to provide the infrastructure for the green hydrogen sector. In this framework, we are keen to ensure that the infrastructure such as water pipes, electricity network, gas network, desalination and storage are common and not within the developer's scope in order to reduce cost as well as reduce waste in the lands that need these services. The third track is to coordinate efforts to maximize local value added in accordance with the directives of His Majesty The Sultan, which stressed the company's development of this sector. We are in constant contact with the Ministry of Energy and Minerals (MEM), the Oman Investment Authority (OIA), the Public Authority for Special Economic Zones and Free Zones (OPAZ), and the Public Establishment for Industrial Estates (Madayn) to achieve this goal.

Future vision of the hydrogen sector

What is the future vision of the green hydrogen sector in general?

The hydrogen sector is very reliable within the vision of Oman 2040 through several pillars, the first of which is enhancing the security of energy supplies so that hydrogen is added to oil and gas. As you know, the direct use of hydrogen provides us with clean energy as well as contributes to the diversification of available energy sources. The second focus is diversification of the national economy. With reference to the sector strategy, we find that

Creating clear and transparent procedures based on the principles of equality and fair opportunities for investors

Key indicators of the green hydrogen sector

15 thousand square km in other governorates

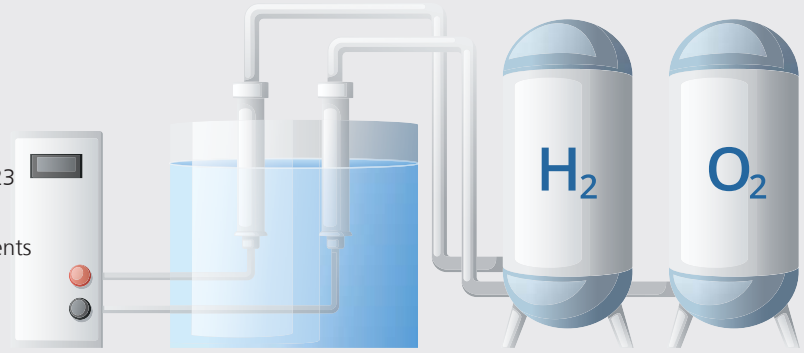
Area allocated for investment:

50 thousand square km in Al Wusta and Dhofar governorates

Investment opportunities are offered in stages through public auctions

The expected investment value:

- $140 billion until 2050
- $30 billion investments of the 5 agreements signed in June 2023
- From $20 to $30 billion investments expected in the second round of public auctions



Target production of green hydrogen

- 1 million tons by 2030
- 8 million tons by 2050

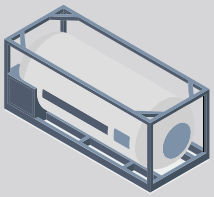
Green hydrogen production in the Sultanate of Oman kicks off with 5 projects

«Amnah» consortium

Partners:
- Copenhagen Infrastructure Partners (CIP)
- Blue Power Partners (BPP)
- Al Khadra Company, part of Hind Bahwan Group
- Target annual production of green hydrogen: 200 thousand tons
- **Project objectives:** production of green steel

BP Renewable Energy Investment

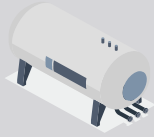
- Target annual production of green hydrogen: 150 thousand tons
- **Project objectives:** Manufacture and export of ammonia



Green Energy Oman consortium

Partners:
- Oman's Global Integrated Energy Company (OQ)
- Shell Oman
- EnerTech, a Kuwaiti state-owned company
- Intercontinental Energy Company
- Golden Wellspring Wealth for Trading

- Target annual production of green hydrogen: 150 thousand tons
- **Project objectives:** Manufacture and export of ammonia



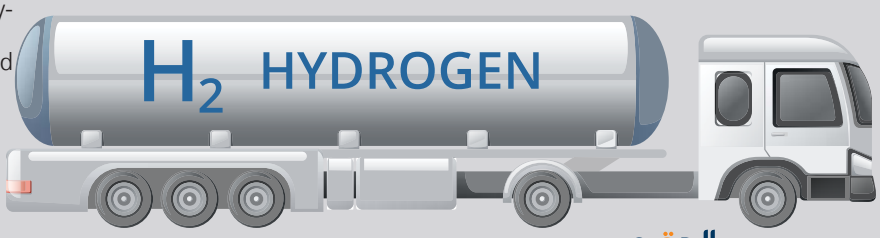
Posco-Engie consortium

Partners:
- Posco Holdings
- MESCAT Middle East DMCC
- Samsung Engineering Co. Ltd.
- Futuretech Energy Ventures
- Korea East-West Power Co. Ltd
- Korea Southern Power Co. Ltd

- Target annual production of green hydrogen: 200 thousand tons
- **Project objectives:** Manufacture and export of ammonia

Hyport Duqm consortium

Partners:
- OQ Alternative Energy
- DEME Concessions
- Target annual production of green hydrogen: 50 thousand tons
- **Project objectives:** Manufacture and export of ammonia



there is a great emphasis on the economic value of investment in the sector and its role in economic diversification through the establishment of associated industries such as those included in the components of hydrogen production like solar panels, wind power towers (wind turbines). The associated industries also include green steel factories and other projects. In addition, the produced hydrogen provides more energy for industrial projects and thus contributes to the expansion of the industrial sector. The third pillar is creating attractive job opportunities for Omani youth, in addition to the role of green hydrogen in achieving environmental aspirations such as zero neutrality.

Gains for the national economy

What are the expected returns of the sector to the national economy?

Investment in the green hydrogen creates other investment opportunities in many sectors. We expect to establish companies serving these projects in a number of fields like metals, electricity and civil works. By encouraging investment in the sector, we are looking forward to making the Sultanate of Oman a global green hydrogen hub so that it uses its capabilities not only in the field of establishing green hydrogen projects, but also in many other areas related to the sector, such as hydrogen storage and supplying transit vessels with hydrogen fuel.

In light of the challenges related to the transportation of hydrogen and instead of converting it into other products such as ammonia and methanol for export and then re-liquefy it upon arrival in the target markets, it is appropriate for international companies to target the Sultanate of Oman and Duqm specifically for their industries to expand production and export their final products through Omani ports. Thus, companies will overcome the technical challenges related to the transportation process.

Public auctions

The company has adopted the public auctions approach. What are the goals you focus on?

The first round of public auctions was launched late last year and the agreements were signed in June 2023. The second round, however, is already launched and is expected to conclude by the first quarter of next year.

The public auctions help to achieve transparency on the one hand and attract serious investors who have the financial solvency to implement such projects on the other hand. Yet, before the company was established, there were initiatives in this area where the government decided not to subject these initiatives to competition for the land plot, but to organize them in accordance with the regulatory framework stipulated by the green hydrogen strategy.

The number of agreements signed in June 2023 for the green hydrogen production projects amounted to 5 agreements, encompassing two agreements with the winners of the first round of public auctions and 3 agreements with entities that started – before the establishment of Hydrom – work on the green hydrogen production projects.

Attracting strategic investors

How do you assess the first round of public auctions?

Through reviewing figures and statistics, we found that the level of turnout during the first round was good as there was a clear competition between international companies. The number of companies that purchased “Request For Proposal” (RFP) reached more than 60 companies. This round witnessed many consortiums between major international companies, which reflects the level of interest in this sector and huge demand for investment in it. The preliminary data for the second round are also good.

Moreover, the first round of public auctions allowed us to attract strategic investors from Denmark and Korea with a firm desire to invest in the sector, technical capability, global reputation and financial solvency. The first consortium is the «Amnah» comprised of Copenhagen Infrastructure Partners (CIP), Blue Power Partners (BPP) and Al Khadra, part of Hind Bahwan Group.

Duqm is the future of green hydrogen and has all factors for successful investment

We look for serious companies with financial solvency and technical expertise

The second is Posco-Engie consisting of Posco Holdings, MESCAT Middle East DMCC, Samsung Engineering Co. Ltd., Futuretech Energy Ventures, Korea East-West Power Co. Ltd. and Korea Southern Power Co. Ltd. As you can see, there is a diversity of investors in these two consortiums.

The previous initiatives

What about the other agreements?

The other three agreements were signed with BP Oman, the Green Energy Oman (GEO) and the Duqm Hyport. These entities started working on the green hydrogen projects before setting up the regulatory framework. Hydrom worked with these companies to align their initiatives with the approved regulations and then signed agreements in accordance with the requirements of regulating hydrogen initiatives prior to the establishment of Hydrom as per Royal Decree No. 10/2023.

Green hydrogen map

****You mentioned earlier that one of the most important elements of investing in the green hydrogen sector in Oman is the availability of the land plots for such projects. Could you elaborate more on green hydrogen map in the Sultanate of Oman and the target locations?***

There are a number of criteria that we have taken into account when determining the lands suitable for the production of green hydrogen.

The first criterion is the availability of wind, solar energy and sufficient space for such projects.

The second criterion is that these lands should be outside the free zones, for these projects need vast areas to produce electricity. That is; if lands are allocated inside the free zones, this will negatively affect the possibilities of these areas in receiving industries, including industries based on hydrogen energy. We believe that the economic value of free zones is higher through attracting industrial projects. This has been agreed upon with the OPAZ to enable free zones to implement their plans to attract industries. The third criterion is that these zones should be at an appropriate distance from World Ports.

With regard to the transportation of green hydrogen to the ports, this will be done through a special pipe system extending from production sites to ports. Through these pipes, energy will be provided to the ammonia, methanol, steel, cement and any other industries that depend on hydrogen energy.

As for the sites, we focused on Duqm in the first round of public auctions, and focused on Dhofar in the second round, through 3 opportunities offered to companies specializing in the sector.

Duqm leads industries

Can we say that Duqm is the one that will lead hydrogen industries in the Sultanate of Oman?

This is predictable. Duqm - with all its components such as the port, solar energy resources, vast territory, geographical location and the regulations set by the Public Authority for Special Economic Zones and Free Zones (OPAZ) in the SEZAD -is qualified to be one of the most important infrastructures for the future of green hydrogen in the Sultanate of Oman.

Investment challenges in the sector

****One of the challenges facing investing in the green hydrogen sector is high cost and the long time before profits are gained. How do you deal with this challenge?***

We took this aspect into account in the agreements signed with the coalitions. The usufruct agreements extend for long pe-

The first round of public auctions successfully closed and the second-round initial indicators are positive

riods up to 47 years, including 7 years for preparation and construction, and 40 years for operation. From our side, we believe that this period is suitable for investors. There are also forecasts that the economic value of green hydrogen will gradually increase as its production costs decrease. Therefore, investment will become more feasible for investing companies.

In addition, gas prices may rise in the coming years in conjunction with the imposition of carbon taxes by gas - consuming countries. The cost of components for green hydrogen projects is expected to decline. We have noted that the cost of solar panels 10 years ago, for example, was about 70% higher than the current cost. Besides, global estimates indicate that -by the beginning or middle of the next decade- green hydrogen prices are expected to reach a break - even point with other alternatives. Regardless of that; green hydrogen is an inexhaustible source, as it is based on sun and wind. For this, it is seen as a new source of energy and also a sustainable and clean source. Also, expansion of global economies will raise the demand for energy sources

Volume of investments

What is the volume of investments expected in the sector?

The expected investments in the green hydrogen sector in the Sultanate of Oman until 2050 are estimated at 140 billion dollars. In the first round of public auctions, the presupposed cost of investments amounted to about 30 billion dollars, and in the second round, we look up for investments at a volume of 20-30 billion dollars.

Expected production

What is the target production of hydrogen from green hydrogen projects?

From the five projects whose agreements were signed in June 2023, the projected production is about 750 thousand metric tons of green hydrogen. The Sultanate of Oman aims to produce more than one million tons of green hydrogen by 2030, through the exploitation of 30% of the allocated land. We expect production to gradually increase to reach about 8 million tons by 2050.

Domestic demand

What are your estimates of the level of domestic demand on green hydrogen.

We see that the domestic demand for green hydrogen in 2030 will reach about 5% of production, but this share will rise to about 17% by 2050, coinciding with the increase in the produced energy. This means that domestic demand will be within 50 thousand tons per year, but it will gradually increase to reach about 1.4 million tons by 2050, in conjunction with the increase in energy produced to 8 million tons per year.

I would like to emphasize here that the priority will be for domestic consumption. We consider export as a good opportunity to increase revenues and direct surplus production, as we have taken into account in the agreements to increase the percentage allocated to domestic consumption if demand rises.

Globally advanced position

What is the position of the Sultanate of Oman on the global green hydrogen map?

The Sultanate of Oman holds an advanced position on the global green hydrogen map.

Volume of investments expected until 2050 is US140 billion

We expect to launch the first green hydrogen project in 2030 .. target production is 8 million tons by 2050

It has the competitive resources needed for successful investment in the sector including land, sun and wind. The Sultanate of Oman is distinguished by its geographical location between East and West, its ports that are capable of providing logistical support to the sector, whether in Duqm or Salalah, and its clear strategy for managing the sector, as well as the seriousness that accompanied the process from beginning until the agreements signing. All these factors place the Sultanate of Oman in an advanced position on the green hydrogen map, and confirm to the world that the Sultanate of Oman is taking serious steps to encourage investment in the sector.

I would also like to note that the level of investment turnout was not affected by the high requirements that we set. Our goal is not to sign with any company, but with companies that can implement the project and have financial solvency, technical expertise and clarity in the idea of the project. We have closed the first round by signing agreements and not MoUs, which is a success for the efforts exerted and reflects the level of global interest in investing in the Sultanate of Oman.

Promotion of investment opportunities

What are the efforts to promote investment in this sector noting that there is a global interest in investing in the Sultanate of Oman?

There is a continuous endeavor to promote the available opportunities more, not only by Hydrom, but also includes several other entities related to the sector, such as the Ministry of Energy and Minerals. The available resources in the Sultanate of Oman require more promotion, thus we have started several virtual meetings, and had external visits. These efforts have begun to bear fruit.

Readiness of markets to receive hydrogen

How do you ensure the readiness of markets? Any examples?

In May 2023, the Sultanate of Oman participated in the World Hydrogen Summit held in Rotterdam, Kingdom of Netherland. The delegation was headed by His Excellency Eng Salim bin Nasser Al Aufi, Minister of Energy and Minerals, who gave a visual presentation on the strategy of the Sultanate of Oman for the green hydrogen sector. The delegation also visited a number the port of Amsterdam and Rotterdam in the kingdom of Netherland and the port of Antwerp in the kingdom of Belgium. I can say that theses visits were successful. Among of the goals was to ensure the readiness of the markets to receive hydrogen. It became clear to us through these visits that the other parties are serious about equipping their ports for this as well. This gives confidence that the efforts being made in Oman are accompanied by parallel efforts in other countries.

During the visits, Duqm Hyport Green Hydrogen Certification Pilot Project was also signed in Brussels, aiming to ensure that green hydrogen production projects in the Sultanate of Oman meet the requirements of the European Union, which paves the way for exporting green hydrogen produced in the Sultanate of Oman in the future to European markets. The company recently participated in making keynote presentations at specialized international conferences in Madrid and London.

The first project to be operational

Finally, when do you expect to launch the first green hydrogen project?

Our goal is for the first green hydrogen project to be commissioned in 2030, or even before. We expect companies to be able to reach this goal by then. The agreements were designed on the basis that the development of projects until they enter the production stage will take about 7 years, including 3 and a half years to take field measurements of the quality of solar and wind energy. A similar period is counted for the preparation of designs and the kick off of construction work. Accordingly,we expect construction to begin between 2026 and 2028, and production to begin in 2030.

Equipped by 5G tech and fiber optic system

The Port of Duqm commissions new container cranes

Duqm - الدقم :

The Port of Duqm recently commissioned new ship-to-shore container cranes after the project was completed by the Public Authority for Special Economic Zones and Free Zones (OPAZ).

OPAZ's investments in installing modern cranes for containers handling in the Port of Duqm represents a qualitative step to develop the Port's capabilities and improve its efficiency. Port of Duqm Company has worked intensively with OPAZ to complete the project in accordance with international standards in this field.

The new cranes are featured with high, smart and fast handling capabilities. They are provided with 5G technologies and fibre optic systems for data transmission and remote control. The cranes are also supplied with smart driving, smart yard monitoring and automatic landing systems. They have the ability to handle the largest carriers in the world.

The number of new cranes is 16, encompassing 4 cranes for transporting containers from vessels to the commercial jetty at a capacity of up to 65 tonnes, and 12 rubber-tyred gantry cranes with a carrying capacity of 41 tonnes.

The new automated cranes are expected to improve the efficiency and productivity of the Port, enhance its ability to handle a larger volume of cargo more efficiently and in a faster way, upgrade the speed of loading and unloading vessels and cargo flow, which will increase productivity and improve port services.

Besides, this project reaffirms the Port's position as an important investment destination and a technologically advanced port, making it more competitive and highly qualified to handle various types of cargo.

The project raises the port's profile as an investment destination

Business Support Director at Port of Duqm Company speaks to الدقم Duqm Economist :

We focus on creating a strong, sustainable and high-potential port community

Duqm - الدقم Duqm Economist:

The Port of Duqm has been a success over the past few years. Eng. Hashim Tahir Al Ibrahim, Business Support Director at Port of Duqm Company, said that the Port aims to create a robust, sustainable and high-potential Port community while meeting the requirements of customers and partners.

Speaking to Duqm Economist, he added: "We strive to promote the use of renewable energy in our operations and provide a sustainable environment for the surrounding community. We are also keen to support regional economic growth by promoting business and investment in the area around the Port, developing infrastructure and improving logistics to attract more businesses to the zone".

He further explained: "Oman Vision 2040 is a key pillar that we are working on to achieve our goals through a comprehensive and sustainable development and enhancing our role as a major hub for business and freight in the zone. We look into applying the basic principles of sustainable development in all aspects through continuous work and joint cooperation with all partners and interested parties. We also focus on achieving the highest levels of quality and efficiency and being a major engine for economic growth and sustainable development in the zone".

Sustainable Development

Eng. Hashim reviewed the objectives of sustainable development that the Port of Duqm focuses on. He said that the Port has set five main areas within its Sustainable Development Programme in line with the Oman Vision 2040 and the comprehensive National Strategy, for investing in reduction of emissions and achieving carbon neutrality by 2050. He also pointed out that the company has developed a sustainable development programme based on the 17 Sustainable Development Goals (SDGs) set by the United Nations.

He said that these goals are crucial to address some of the most pressing global issues at present, stressing that the areas set by the Port are a high-level framework that can be used to streamline sustainability initiatives at

Pillars of sustainable development in the Port of Duqm

Flexible infrastructure and forthcoming logistics centre in Oman- Focusing on:

- Building a robust infrastructure capable of encountering future challenges, climate changes and natural disasters
- Establishing logistics centres and energy infrastructure
- Developing transport networks to promote economic growth and reduce environmental impact

Safety and Security- focusing on:

- Ensuring the safety and security of all the concerned parties in the Port of Duqm, including employees, customers and the community
- Taking the necessary safety and security measures to address potential risks and challenges
- Implementing contingency plans and enhancing cyber security as well as physical security

Governance and Ethics- focusing on:

- Promoting responsible leadership and ethics at the Port
- Ensuring companies' adherence to the highest ethical standards
- Taking responsible and transparent decisions - addressing anti-corruption issues

Climate and energy- focusing on:

- Promoting environmental sustainability and reducing carbon emissions of the industrial and infrastructure sectors in Duqm
- Investing in renewable energy sources and promoting power efficiency
- Developing creative solutions to achieve sustainable development and reducing the effects of climate change

Connecting with the community-focuses on:

- Interaction and communication with residents of the region and other partners of the port
- Developing initiatives to communicate and join hands with partners
- Involving the community in the operations related to logistics and infrastructure

Enhancing the use of renewable power and providing sustainable environment for economic growth

Improving logistic services to attract more businesses

Committed to achieve comprehensive development and finding balance in different dimensions

the Port, enhance its influence and direct the use of resources more effectively. “By focusing on these pillars, we seek to enhance environmental, social and economic performance at the Port, promote a balance between development and conservation of natural resources as well as enhance communication and transparency in our operations” he clarified.

Eng. Hashim confirmed: “We are committed to achieving a comprehensive sustainable development and are working to find a balance between the environmental, economic and social dimensions to achieve a sustainable future for the Port community and the surrounding area. The sustainability strategy at the Port of Duqm is consistent with the Sustainable Development Programme at the local and global levels. Efforts are exerted to achieve the internationally agreed SDGs, which include the United Nations Global Compact, the Sustainable Development Goals and the Paris agreement on climate change”.

Five pillars

Eng. Hashim mentioned that the five guiding pillars that make up the sustainability strategy of the Port of Duqm include: security and safety, governance, building a strong infrastructure to encounter future challenges, climate changes and natural disasters, establishment of logistics centres, power infrastructure, transport networks to promote economic growth and reduce environmental impact, in addition to enhancing environmental sustainability and reducing carbon emissions of industrial sectors and infrastructure in Duqm, while strengthening communication with the community.

Implementation of the sustainability programme

Eng. Hashim Tahir Al Ibrahim explained: “We selected a number of competencies, from within the Port, who showed great interest for sustainability and realised the value of individual participation. They were trained to oversee specific programmes compatible with the

Sustainable Development Goals. This strategy has promoted the personal and professional growth of employees while developing sustainability projects at the same time, giving them the tools, they need to make influence within the company in parallel with the progress they make in their careers."

He stressed that the Port of Duqm Company makes unremitting efforts to achieve its strategic pillars' objectives, in cooperation with partners to produce green steel and green hydrogen and to develop green power plants in the Sultanate of Oman. He pointed out that the Port Company signed land reservation agreements with several companies such as Mitsui & Co Ltd, Kobe Steel Ltd, Vale Company and Jindal Shadeed Group.

"The company also took part in workshops and panel discussions on infrastructure, challenges and opportunities in the Sultanate of Oman. It developed programs to deal with disasters, emergencies and risks. It won the Award of excellence in health and safety performance from ASYAD Group. The Port of Duqm Company is keen to conserve resources, provide emission-related data, and implement initiatives in the field of diversity and youth development. Employees of the Company are also regularly trained to ensure quality performance and compliance with environmental, health and safety standards" he elaborated.

Multiple partnerships

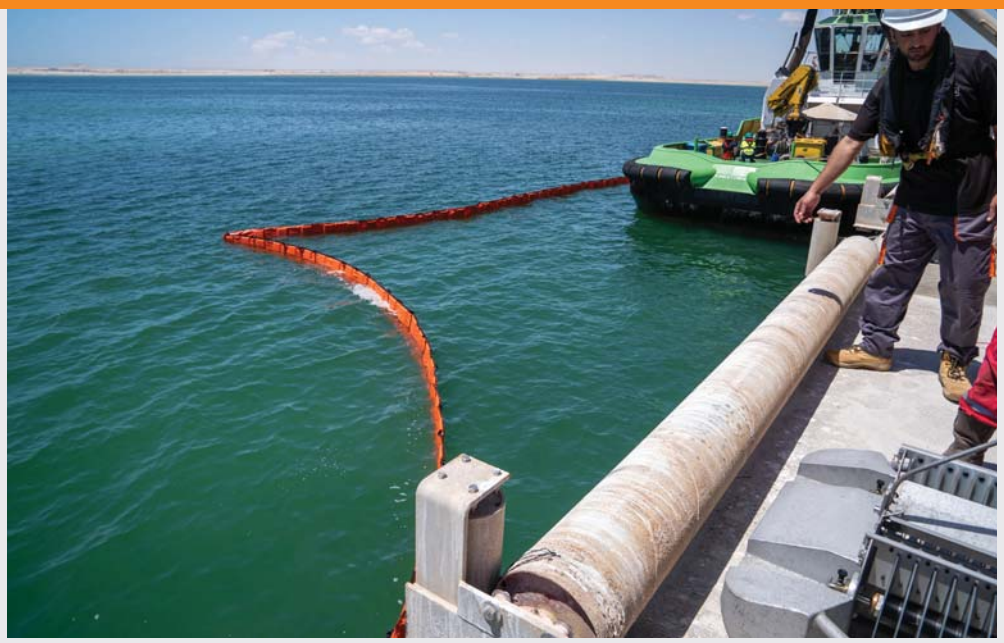
Eng. Hashim said that the Port of Duqm Company is working to build partnerships with external partners, including government agencies, educational institutions, environment associations and non-governmental organisations, in order to achieve sustainable development goals and the key strategic pillars' objectives. He further pointed out the existing cooperation with Oman Environment Society aiming to protect whales and raising community awareness on the same. The Port promotes biodiversity, supports sustainable fishing methods, enhances ocean and marine resourc-

Sustainable strategy focuses on infrastructure, governance, and logistics

Continuous training for employees to ensure quality of performance

Building external partnerships and conducting initiatives in diversification and youth development

We seek to conserve biodiversity, oceans, marine resources and protect whales



es conservation to ensure healthy and vital oceans for future generations.

He indicated that the Company also aims to achieve the objectives of protecting marine environment by implementing whale management programs and controlling the growth of jellyfish, stressing that the Company seeks to preserve biodiversity, preserve the oceans and marine resources, promote sustainable fishing and protect whales. It also conducts aquaculture and seaweed experiments through the usage of renewable resources and promotion of sustainable food production.

Waste management

Speaking about the efforts in the field of waste management, Eng. Hashim said that the Port of Duqm Company applies effective systems for the management of liquid and solid waste in order to preserve ecosystems. He added: “The waste generated by port operations is managed effectively and efficiently through waste collection, sorting and fully recycling processes. The company is committed to the regulations of the SEZAD, ports, and national standards, and is regularly monitoring them in line with environmental permits”.

Community and youth empowerment

To conclude, Eng. Hashim Tahir Al Ibrahim, Business Support Director at Port of Duqm Company, praised the company's efforts to empower young people, develop their skills as well as develop the local community. He said that during the past period, youth development programs were implemented in cooperation with the General Directorate of Education in Al Wusta Governorate and a number of private sector institutions.

He confirmed: “The Port focuses on building sustainable partnership in various business operations by empowering local entrepreneurs, enhancing their abilities to participate in the economic development of SEZAD, awarding various businesses and services to small companies, and by developing creative activities and training entrepreneurs on labour market skills. The Company seeks to achieve sustainability, community and environment responsibility in its activities. It attaches great importance to cooperation with the community and develop it, in addition to involve youth and encourage them to participate in training and development programmes.”

Enabling local entrepreneurs to participate in the economic growth

10 billion-dollar investments in Duqm by OQ and partners

Oil Storage Terminal in Ras Markaz

Duqm - الدقم :

OQ, the global integrated energy group, in collaboration with its partners, has made investments surpassing $10 billion in Duqm. This significant contribution is part of their commitment to leveraging Oman's abundant resources, promoting the government's economic diversification initiatives, and attracting foreign investments.

These investments encompass several major projects, such as Duqm Refinery which stands out as a joint enterprise between OQ and Kuwait Petroleum International, Ras Markaz Oil Storage Terminal- 100% owned by a local investor, and Marafiq Company's investments- a joint venture between OQ and Thailand's Gulf Energy Development Company.

Economic diversification policies

Hilal bin Ali Al Kharusi, Chief Executive Officer for Commercial and Downstream at OQ, said: "«These investments reflects the government's plans to enhance its economic diversification strategies in alignment with Oman Vision 2040, emphasising the optimal utilisation of Oman's natural resources and the promotion of sustainable development. Such investments mark a significant transformation for the industrial sector, especially in downstream industries".

Talking to media, he further said: "Most of these projects have been successful, with their construction phases completed and now operational, producing and exporting beyond the borders of the Sultanate of Oman. Due to its proximity to international shipping routes, the economic projects in Duqm facilitate access to world markets, contribute to promoting economic growth and attracting investments and facilitate trade exchange.»

Business progress

Hilal bin Ali Al Kharusi elaborated that the Duqm Refinery is nearing commercial operation, with its trial run reaching advanced stages, adding that Marafiq Company has successfully completed the development of a power and water integrated plant with an impressive production capacity of up to 326 megawatts of power and 36,000 cubic metres of water daily. "Marafiq stands as a pivotal provider of essential infrastructure and services. such as electricity and potable water. As for the Ras Markaz project, it has entered the commercial operation phase. It already received 10 shipments of crude oil, since the beginning of 2023 until September, to meet the needs of the Duqm Refinery."

Al Kharusi confirmed that projects by OQ's and its partners reflect the desire to diversify sources of income, increase exports, and provide excellent storage facilities and services. These projects also add value to oil production and expand investment opportunities in the Special Economic Zone at Duqm (SEZAD) for the coming periods.

Hilal Al Kharusi: The Group's investments reflect the government's plans to expand economic diversification policies

Economic projects in Duqm leverage their location near international shipping routes to reach global markets

Duqm Refinery begins exporting high-quality diesel

Products storage and export facilities at the Refinery in Duqm Port

Supply chains tested... trial operations exceed 81%

Duqm - الدقم :

In September 2023, the Duqm Refinery succeeded in exporting first shipment of high-quality diesel as per to the international specifications.

The Duqm Refinery Project is a joint project between the OQ Group and Kuwait Petroleum International Company and is located in the heart of the Special Economic Zone at Duqm.

The Duqm Refinery has a capacity of producing 230,000 barrels per day and this raises the production capacity of Omani refineries to 500 thousand barrels per day.

This success coincides with the company getting closer to achieving commercial operation, with trial operations continuing to progress, exceeding 81 percent, while the percentage of construction work has exceeded more than 99 percent by September 2023.

The trial operations included testing all supply chains at the Duqm Refinery, including crude oil storage facilities at Ras Markaz and an 80-kilometre-long crude oil transport pipeline. In addition to testing the readiness of the storage and export facilities of products at the Port of Duqm, which have all been successful.

Until the beginning of September, Ras Markaz crude oil tanks received more than three million barrels of Omani and Kuwaiti crude oil, which were later pumped from Ras Markaz to the refinery complex in Duqm via the oil transportation pipeline.

As part of the trial operations, the first shipment of naphtha was exported in June, while the first shipment of high-sulfur fuel oil was exported between the end of April and mid-May 2023.

Marafiq officials receiving the Award

Won Integrated Utilities Company of the Year Award

Marafiq achieves the lowest water loss rate globally

Duqm - الدقم :

Marafiq, a joint venture owned by OQ, a subsidiary of Oman Investment Authority, cemented its position as a sustainability leader by winning the prestigious Integrated Utilities Company of the Year award at the World Economic News Network's Sustainability Innovation Awards 2023. This award recognition that identifies sustainability-focused innovative projects in the Middle East validates Marafiq's ambitious ESG (environmental, social and governance) strategy aimed at enabling Oman's vision for a sustainable future.

With its state-of-the-art water network management in Duqm Special Economic Zone, Marafiq achieved an unprecedented non-revenue water loss rate of just 9.1% - one of the lowest globally. What makes it even more impressive is that the loss percentage in water networks is around 20% and in some cases even reaches 35%, causing severe economic and environmental losses. The glorious award ceremony held in Dubai, UAE celebrated Marafiq's commitment to optimize precious water resources in pursuit of the UN's Sustainable Development Goals, Oman Vision 2040, and the Sultanate's net zero targets for 2050.

Principles of sustainability

Abdullah Al Hashimi, Managing Director of Marafiq, said, «As a company founded on principles of sustainability, we implemented robust asset monitoring, data analytics and world-class practices to minimize water wastage and carbon footprint. This award recognizes our strategic ESG priorities of water conservation, operational excellence and community well-being.»

By leveraging innovation and technology, Marafiq is setting global benchmarks in responsible water management. Its digital initiatives for monitoring usage, reducing leaks and engaging consumers also showcase Marafiq's emphasis on stakeholder collaboration in building a sustainable future. Over the years, Marafiq has achieved its operational efficiency measures as evidenced by the ISO credentials. Marafiq was able to integrate efficiency into its operations at a very early stage.

Al Hashimi added, «We are honored by this international recognition of our sustainability efforts. It motivates us to scale up ESG integration across our operations and thus contribute towards Oman's economic, social and ecological objectives.»

As a leading utility player, Marafiq aims to spearhead the zone's sustainability transformation through its environmental stewardship, community engagement and governance best practices. With accolades like this, Marafiq is poised to accelerate its leadership in enabling Oman's vision for a net zero and socially inclusive society.

Abdullah Al Hashimi: the Company adotps world-class practices in monitoring water network performance

Water loss rate achieved by Marafiq stood at 9.1%

To enhance automotive industry in Oman and the region

Karwa Motors starts armoured vehicles manufacturing and launches “Madaris” bus prototype

Tariq Al Humaidani: Success of Karwa was the reason to assign armoured vehicles manufacturing to it

Duqm - الدقم :

Karwa Motors, a subsidiary of the Oman Investment Authority (OIA), announced the start of manufacturing armoured vehicles, following a cooperation and manufacturing services agreement signed with Taj Duqm Company, through which the manufacturing operations of armoured vehicles are transferred to Karwa Company in the Special Economic Zone at Duqm (SEZAD).

Dr. Ibrahim bin Ali Al Balushi, CEO of Karwa Motors, confirmed that the agreement comes within the framework of the company’s strategy to diversify production lines, and leverage its manufacturing capabilities. He explained that the agreement reflects the company’s commitment to strengthening the local industry, expanding into regional and international markets, and stimulating commercial activity of the Special Economic Zone at Duqm.

Al Balushi applauded the role played by the Public Authority for Special Economic Zones and Free Zones (OPAZ) in attracting investments to SEZAD and providing means for its success and continuity. He also praised the role of the Oman Investment Authority and Qatar Transport Company for their support to Karwa Motors to implement its strategy aimed at strengthening the automotive industry in the Sultanate of Oman and the region. He stressed that this support will have a significant positive impact on the level of localisation of this industry.

Karwa Motors is a joint venture between Qatar, represented by the National Transport Company “Qatar Transport”, with a 70-percent share, and the Sultanate of Oman, represented by the Oman Investment Authority, with a 30-percent share.

Dr. Ibrahim Al Balushi: We are committed to boost local industry and expand into regional and global markets

Reinforcement of investments in Duqm

Tariq Al Humaidani, CEO of Taj Duqm, expressed his delightedness about the agreement and said that the successes achieved by Karwa Motors over the past two years encouraged the company to transfer vehicle manufacturing to it. “We expect that the agreement will enhance the performance of the two companies, help them achieve their aspirations and goals in boosting investments in the Special Economic Zone at Duqm, and maximise the gains achieved for investors in both companies” he added.

According to the agreement, Karwa Motors will allocate a new production line to produce armoured vehicles, benefiting from the company's capabilities and equipment.

Karwa Motors owns a factory specialised in bus manufacturing, with an average production of about 600 buses annually. The factory began production in 2021, focusing in its first phase on producing buses for the Qatar World Cup 2022. The company produces a variety of city buses, school buses, as well as long-distance and luxury buses.

Built on an area of 600,000 square metres in the Special Economic Zone at Duqm, the factory is equipped with the latest technologies, and includes various production workshops for cutting, welding, dyeing, assembling components, materials, equipment, and engines, in addition to central maintenance workshops, warehouses, electricity stations, a filling station, as well as the administration building and other facilities.

Launch of school buses

On the same context, Karwa Motors Company launched its modern model of school buses "Madaris" designed in accordance with the highest safety standards to ensure the safety of students.

Buses will be available in the local market by the beginning of 2024

Key features of Karwa school bus

- Equipped with internal and external surveillance cameras
- Complies with GCC standards
- Accommodates 23 students
- Provides clear visibility of the driver and passengers
- Has an emergency outlet
- Has a safe arrangement of passenger seats
- Has security doors lock
- Has high quality air conditioning
- Has an automatic fire extinguishing system
- Has a location tracking system via «GPS» technology
- Has an external ensor system
- Has a distinctive design of side doors with a sensor system

"Madaris" buses designed according to highest safety standards to ensure students' safety

Dr. Ibrahim bin Ali Al Balushi commented that the launch of school buses comes as part of the company's unwavering commitment to provide transportation solutions that meet the requirements of the concerned parties in the Sultanate of Oman and the regional market. He clarified that the bus was designed after addressing challenges faced by the school transport sector in terms of public safety and school transport requirements.

He added that Karwa school bus is equipped with the state-of-art safety devices and systems that are compatible with the system of "Darb Assalama" (safe journey) that was approved by the Ministry of Education, indicating that the step embodies Karwa's commitment to ensuring the safety of students, which represents a top priority, on one hand and meeting the requirements of educational institutions on the other hand. Al Balushi added that Karwa bus is designed to exceed safety and quality expectations and it expresses the company's mission to deliver excellence in every aspect.

"Madaris" bus features

The bus's standout features include capacity to seat 23, compatibility to Gulf Cooperation Council standards, internal and external surveillance cameras, strategically arranged passenger seats, an emergency exit, clear visibility for the driver and passengers, an automatic fire-extinguishing system, high-performance air conditioning, safety locks, and innovative side doors equipped with sensors.

Additionally, the buses come with First Aid kits, engine sensors, GPS-based location tracking and a system to monitor driver performance.

Spare parts

Al Balushi added that Karwa Motors Company will provide spare parts for the vehicles for a period of not less than 10 years, along with high-standard regular maintenance and after-sales services in all governorates of the Sultanate of Oman. It is expected that new Karwa school buses are set to be available in the local market by the beginning of 2024.

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Smart cities… history and smart peoples

Few years ago, I visited headquarters of a large French firm in Paris specialized in the field of energy. We watched, listened and discussed the firm's potentials in the field of Internet of things, artificial intelligence, as well as modern usage of information technology and its prospects.

Back then, Bill Gates' smart home and how everything in it functioned by a remote control, was the prevailing topic. I commented that day it is noticeable that those who build smart homes for themselves are becoming more and more eager to visit heritage and historical places, buy handmade products, and visit primitive hotels that have no electricity and communications. I knew that it is the nature of life; that is, every action has a reaction.

From this point of view, I can say that when talking about smart cities, whether economic, residential or service cities, one question arises: how to distinguish one smart city from another if they are equal in all the know-how and universally agreed smart city determinants?

A sustainable smart city is, as has been repeatedly said, «an innovative city that uses information and communication technologies to improve the quality of life, make its economic, social, environmental and cultural processes, services and activities more efficient and more competitive, while ensuring that they cater the needs of current and future generations».

Other additions to the above definition can be found at the European Union or at the United for Smart Sustainable Cities Initiative (U4SSC), a partnership between the United Nations (UN), the ITU and other global or civil society organizations, whose distances between everyone are apparently very close.

The basic observation regarding all definitions and all performance indicators designed to measure the goals, degree of effectiveness and progress of smart cities is that the technological factor dominates them. Of course, no one objects to having technology with its advanced networks, sensors, robots, advanced software, huge databases, the Internet of things, quantum computers, augmented reality, Geographic Information Systems, etc. No one disputes how it penetrates into all spheres of life and human activity. We notice this in our homes and in our businesses. However, it is said that information technology can serve the proper application and acceleration of the achievement of all the 17 basic Sustainable Development Goals (SDG) and sub-goals set by the United Nations.

But the main criterion that makes a difference in measuring the progress of smart cities or smart villages is the extent to which these cities are consistent with the cultural and historical heritage of the nation in which they are being built and their smart openness, at the same time, to deep human experiences in the planning, design, management and operation of smart cities in the proper concept. It is also the extent to which the degree of human intelligence is compatible mentally, cognitively, socially and spiritually with the degree of intelligence of the city, and how the gaps in the distances between the two can be managed when they occur – and they inevitably do - because technology advances faster – so that the balance of movement remains disciplined and the push forward continues without disabilities caused by taking care of technology higher than human care. Herein, it is inevitable that equal opportunities for everyone in quality education.

One might say that there are a number of key performance indicators for sustainable cities, including: social inclusion, equality in access to services, quality of life, and environmental sustainability. The European Union's vision for Smart Cities is based on a number of important elements such as: the intelligence of human and social capital, transparency, smart participation in decisions, and good social cohesion. In fact, this is true. But there is still no national or global mandatory to apply all of this so that the above-mentioned human and social content of smart cities may remain a wish.

On the other hand, there is growing global calls for a deep look at the problems of smart cities, such as the need for large funding, high cost, widespread reliance on for-profit companies, the risks of reducing privacy, and the accumulation of complex waste difficult to recycle or dispose of.

Therefore, it can be bet that the Sultanate of Oman, with all its ancient and modern history and its relationship with the land and people, can offer a different experience in smart cities of all kinds, and as we have seen, there is a unique integration in the components of Sultan Haitham Smart City; which is characterized by a clear identity or personality of the place. Everything in this city has been designed to meet future aspirations in building productive, creative and humane cities, while meeting the requirements of modern life based on simplicity, luxury and restriction-free kick off.

On the other hand, it is important to consider the importance of distinguishing between the economy of smart cities and smart economic cities, as each smart city eventually has its own economies. Yet, the residential city is definitely different from the smart economic city, the latter has a specific economic activity in which all the arts and innovations of technology are used to create a higher added value in a sustainable sequence while preserving the environment in a comprehensive sense. In both cases, we cannot overlook the central role played by the government in formulating public policy for the development of communications and information technology infrastructure, setting up legislative and institutional frameworks necessary to regulate the services related to them, establishing partnerships between public and private sectors, and between home and abroad, developing appropriate public and private financing programs, taking advantage of the accumulated national and global experience and reassessing the situation regularly, with a gradual transition from the current situation to the smart situation.

A final point remains that Duqm, as an economic city emerging on the digital path from an early stage, has to turn the sea smart as much as the land. This means: providing smart customs, repair, maintenance and logistic support services, fishing services, marine manufacturing and shipbuilding; all in an «intelligent» way while maintaining the distinctive location of the region.

Includes integrated geographical maps for the zones supervised by OPAZ

Omap platform launched

The platform allows the investor to search for locations best suit to his project and the nearest port for exporting products

Enabling the investor to access accurate information about the land available for investment and related economic activities

Muscat - الدقم:

The Public Authority for Special Economic Zones and Free Zones (OPAZ) announced the launch of Omap Platform, being a digital portal for integrated geographical maps that include all-inclusive data of masterplans for the special economic zones, free zones, and industrial cities overseen by OPAZ. This platform enables its users to access detailed services and information of the zones through the available digital maps and tools. Omap marks a first serving the online land allocation service that was launched earlier by OPAZ.

His Excellency Dr. Ali bin Masoud Al Sunaidy, Chairman of the Public Authority for Special Economic Zones and Free Zones, said that the platform is part of the digital transformation programme of OPAZ, and it is characterised by a great interactive ability with investors as it provides spatial information that helps the investor from inside and outside the Sultanate of Oman to search in all economic zones, free zones and industrial cities for the appropriate locations to establish projects.

He added in a press statement, "The platform provides information about the services, whether those on the ground or under construction. The platform is authorised to delete all lands that are unsuitable for investment, and it also helps the investor to know the nearest port or airport to export products. Further, it displays renewable energy sources".

Raising quality of the services

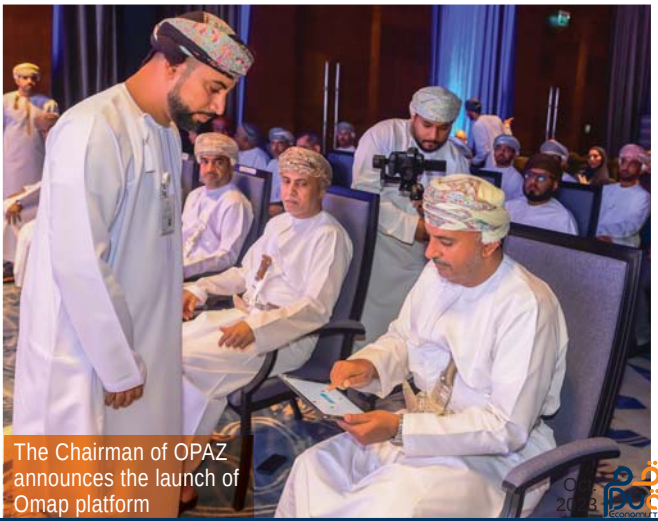
Introducing Omap Platform complements OPAZ's efforts to improve the quality of services provided to investors by facilitating and accelerating procedures, reducing time and efforts, offering opportunities for all investors and beneficiaries, and ensuring that plans do not overlap. The Platform guarantees easy access to comprehensive and accurate spatial information through detailed interactive maps for all the zones, as well as identifying the vacant lands for investment and its associated economic activities.

This Platform aims to promote the investment opportunities in these zones within and outside the Sultanate of Oman, provide information and spatial systems that support the decision-making process for investors, and enable them to use modern technologies in urban planning processes and future expansion with the possibility of printing maps.

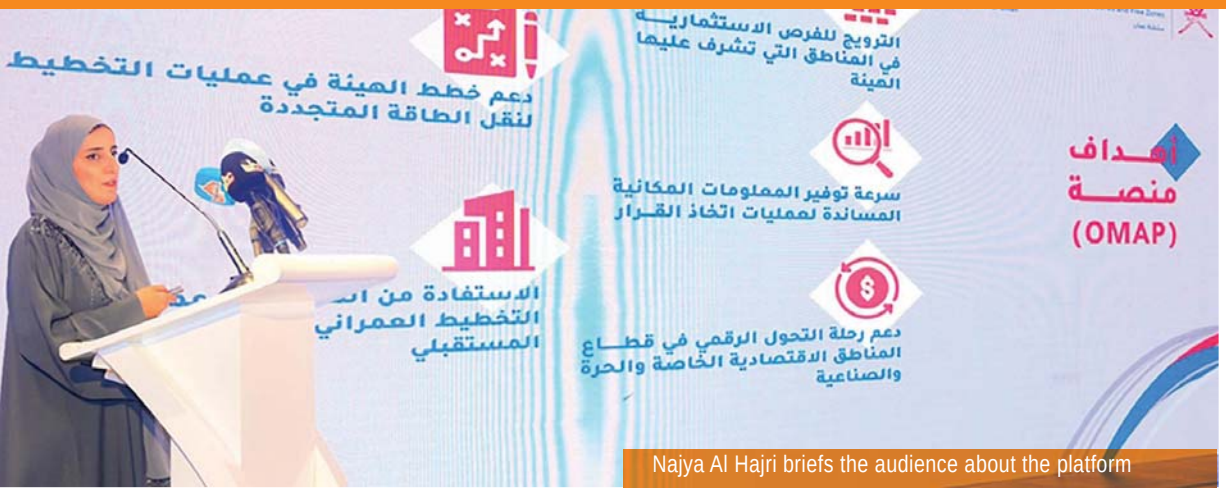
Searching for investment locations

Speaking on the occasion, Najya bint Sultan Al Hajri, Section Head of Geographical Information System (GIS), pointed out, "Omap Platform provides a range of features, including the search for specific locations or plots of land for investment and providing detailed information about key landmarks and facilities such as hospitals, restaurants, schools, stores and hotels, which could be found in the nearby.

Further, users can get the details of lands by its type, usufruct rates, location coordinates, size, and the nearby utilities such as electrici-



The Chairman of OPAZ announces the launch of Omap platform



Najya Al Hajri briefs the audience about the platform

ty, telecommunications, water, and public and private transportation networks. Moreover, the Platform makes it possible for users to measure the distance between different locations and how far they are from the transportation networks concerned with shipping goods and products to foreign markets".

"The Platform provides those Geographic Information System (GIS) enthusiasts the opportunity to obtain the latest satellite visuals of lands and sites, allowing them the ability to add information, upload pictures, and coordinates for the various sites in OPAZ affiliated zones. In addition, Omap familiarises the users with the locations dedicated for drones and the restricted areas for flying drones. As an additional future feature, a new service for photographing projects, based on the investor's request, will be included in the Platform, she further added.

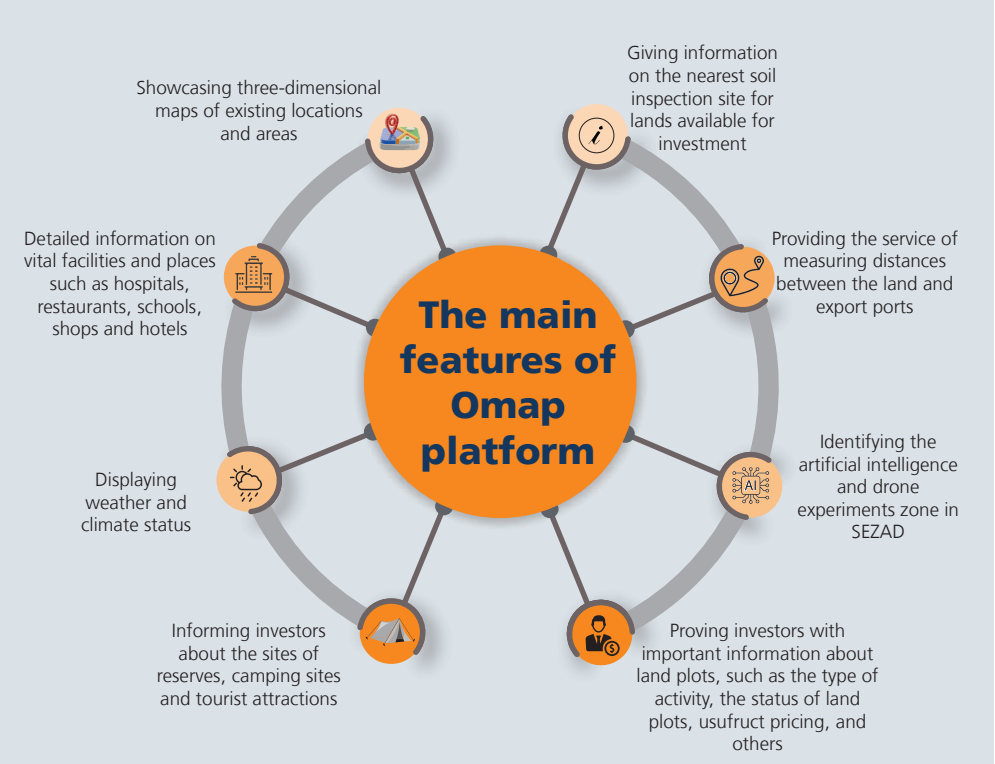
Al Hajri explained that the Platform is equipped by a set of tools that support users, bringing a measurement tool, a planning, drawing and writing on maps tool, a tool for searching for nearby services, a tool for creating a cadastral drawing (Krooki), a tool for printing maps, and a site selection tool by which users can record the coordinates digitally, and the System will validate the location on maps in an interactive way.

Multiple features

On the other hand, the Platform brings a number of advantages to the users, such as identifying various biodiversity sites, reserve sites, tourist attractions, camping sites, and others. In addition, the Platform's users can get an insight on the weather and climate conditions as it is connected to climate monitoring stations' systems in the zones. Likewise, the Platform provides information related to soil tests for different sites in the Special Economic Zone at Duqm, being a platform attracting future and artificial intelligence technologies.

It is worth noting that Omap Platform will contribute to promoting special economic zones, free zones, industrial cities and its investment opportunities through the advantages it provides. Omap ensures an easy access to information and various geographical data as well as providing unified electronic services at lower costs. It will also serve developing and enriching urban planning and development procedures and promote the establishment of smart digital economic cities.

Therefore, all interested users can access the Omap System through the website of the Public Authority for Special Economic Zones and Free Zones (OPAZ) (https://www.opaz.gov.om) from anywhere worldwide.



Providing information and spatial systems to support the decision-making process by investors

Many advantages to benefit users including including locating biodiversity sites, tourist attractions and weather status

Giving information to infer soil tests for a number of sites in the Special Economic Zone at Duqm

Raising quality of the services provided to investors and promoting investment opportunities

9 new e-services launched in the Special Economic Zone at Duqm

The new services go in hand with the growth of projects and accelerate business pace

Muscat - الدقم :

The Public Authority for Special Economic Zones and Free Zones (OPAZ) launched a package of new digital services in the digital portal of the Special Economic Zone at Duqm (SEZAD). The new services support the digital transformation plan of OPAZ being implemented in the special economic zones, free zones and industrial cities and reflect its efforts to automate procedures for investors.

The new package brings nine services related to the constructions sector, including the excavation permit service, cutting the asphalt road, excavating under the road, installing signals or banners on the road's path, agricultural works, excavations, backfilling, and other works within the road's right of way, supplying electricity, water, gas, telephone, and sewage services, installing lighting poles, and driving vehicles of exceptional weights or dimensions on the road, building intersections, entrances and exits on the road, and constructing roads.

Moreover, these services come in line with the framework of OPAZ efforts to facilitate and accelerate procedures for investors in SEZAD, save time and efforts, and achieve transparency for all investors in the Zone. On the other hand, these services represent a continuation of the digital transformation process, which started by automating the one-stop services in SEZAD, accelerating the process of investors' transactions, and facilitating the practice of economic activities.

Commenting on the new services, Mohammed bin Abdulmajeed Al Hooti, Lead of Digital Transformation at the Public Authority for Special Economic Zones and Free Zones (OPAZ), indicated that the launch of these new services come in line with the development witnessed by the Special Economic Zone at Duqm in terms of the increase in the number of projects in various sectors, as well as to facilitating procedures for investors and beneficiaries, and making services provided by OPAZ and its affiliated zones more convenient.

"The digital services provided by OPAZ contribute to accelerate the pace of business, organise it, and simplify it to meet the expectations of the digital government. Furthermore, OPAZ continues its endeavour to introduce more services that will contribute to thriving the business environment in special economic zones, free zones, and industrial cities", Al Hooti explained.

It worth noted that investors can access the new services through SEZAD's digital portal: (eoss.duqm.gov.om) from anywhere around the world.

SEZAD opens the first ever 3D café

Duqm - الدقم :

The first-ever commercial coffee shop constructed using the 3D printing technology was opened in the Special Economic Zone at Duqm (SEZAD) in August 2023. The 101-metre establishment has been entrusted to the management of an ambitious Omani entrepreneur.

Sultan bin Said Al Defaie, Small and Medium Enterprises Specialist in the Special Economic Zone at Duqm (SEZAD), commented: "Supporting small and medium-sized enterprises is the focus of our attention and care, and we are keen to promote their growth and business development. One of the Omani youth entrepreneurs was selected to operate the coffee shop, further reinforcing our initiatives to bolster In-Country Value (ICV), promoting an entrepreneurial culture, and driving social and commercial development in SEZAD.»

Ali bin Nasser Al Qassabi, the ooperator of Cafia Café, said: "We are proud of being the first company in SEZAD that operates the ground-breaking 3D café. This is the second branch of the Omani brand "Cafia".

He further clarified that the café' branch in Duqm focuses on two key elements; the quality of the coffee and beverages on offer and the café's interior design which is meant to exhibit a unique character, making it an ideal destination for both local residents and visitors.

The café' is situated in close proximity to the Duqm Frontier Complex, the road leading to Duqm Beach and to the hotels and residential complexes.

In May 2023, the Public Authority for Special Economic Zones and Free Zones (OPAZ) won the 3D Printing Technology Award within the COMEX Global Technology Show Awards 2023 for its ground-breaking utilisation of three-dimensional printing technology in the construction of a commercial café and its annexes.

Ali Al Qassabi: Our endeavour is to make it an ideal destination for residents and visitors

The committee during the meeting

Laying the groundwork for an Omani – Saudi company to manage and operate the zone

The Executive Committee of Integrated Economic Zone at Al Dhahirah discusses development plan of infrastructure facilities

Identifying investment opportunities for the target sectors, incentives and proposed benefits

OPAZ invites bids to design and supervise implementation of infrastructure facilities in EZAD

Duqm - الدقم :

The Executive Committee overseeing the development of the Integrated Economic Zone at Al Dhahirah Governorate (EZAD) held its second meeting in 2023 chaired by H.E Eng. Ahmed bin Hassan Al Dheeb, Deputy Chairman of the Public Authority for Special Economic Zones and Free Zones (OPAZ) and Chairman of the Committee. EZAD is located about 20 kilometers away from the Empty Quarter border port between the Sultanate of Oman and Saudi Arabia, and has an area of 388 square kilometres.

During the meeting, the Committee discussed the establishment of the Omani-Saudi Company, which will manage and operate EZAD. It addressed the development plan for EZAD infrastructure facilities and the In-Country Value, and looked into investment opportunities for EZAD targeted sectors.

The Committee highlighted the most important developments in the EZAD project, the proposed incentives, benefits, and facilities. In addition, the Committee revised the plan of the management and operation of EZAD land port and customs station, and discussed the request submitted by Al Dhahirah Company to set up a one-stop shop at the port.

The Committee also tackled the proposal for floating the tender for setting up a one-stop shop at the commercial centre for Omani companies or the joint Omani-Saudi business alliance.

The Committee includes a number of officials from OPAZ – the Omani side, and the Ministry of Investment, the Economic Cities and Special Zones Authority (ECZA) and the Saudi Development Fund (SFD) – the Saudi side.

Tender for consultancy services

In September 2023, the Public Authority for Special Economic Zones and Free Zones (OPAZ) has announced through the electronic tender system (ESNAD) a tender for Omani and Saudi companies to bid for providing advisory services for designing and supervising the implementation of infrastructure facilities for the Integrated Economic Zone at Al Dhahirah Governorate (EZAD).

The tender was launched after completing detailed studies and plans required for the establishment of the zone. Its scope includes: design and supervision of the first phase's infrastructure facilities like roads, electrical installations, water and sewage networks, telecommunications networks, gas networks, industrial waste treatment and necessary area facilities like administrative and commercial buildings besides some ancillary facilities.

EZAD Masterplan

A project in Salalah Free Zone

Worth RO 727 million.. New investments in Salalah Free Zone

Salalah - الدقم :

Salalah Free Zone, signed seven usufruct (land lease) agreements with a total investment of RO 727 million during the first half of 2023, bringing the total investment volume in the zone to about RO 4.5 billion.

The usufruct agreements included a number of projects in the manufacturing and logistics sectors, most notably: the establishment of ammonia and urea manufacturing plant at a cost of RO 576.9 million, a factory for the production of washing powders and detergents at a cost of RO 38.4 million, and factory for the production of ferroalloy (ferrosilicon) and wrapping paper at a cost of OR88.4 million. The agreements also included granting the usufruct right to a project in the field of manufacturing and packaging textiles and plastics for healthcare, food and beverages at a cost of RO 3.8 million.

The first half of this year also witnessed the opening of the first phase of the hosting, data processing and cryptocurrency mining center, as well as the opening of the first gulf trading factory specialising in the production of baked goods.

A factory for ammonia and urea manufacturing and another for washing powders and detergents

Nationalities of new projects:

- Sultanate of Oman
- Yemen
- China
- Russia
- Germany
- Pakistan

Performance of Salalah Free Zone until June 2023

- The number of signed agreements increased to 127
- Signing of 7 usufruct agreements with an investment volume of RO 727 million
- The cumulative investment volume increased to RO 4.5 billion
- Leasing of 5.8 million sqm of leasable land
- The total number of industrial projects in the zone amounted to 71
- Occupancy rate in the territory of the zone stood at 47.6%

Hosting Data Processing and Cryptocurrency Mining Center inaugurated in Salalah Free Zone

The project aims to promote digital investment and localize advanced technologies

Salalah - الدقم :

The first phase of the Hosting Data Processing and Cryptocurrency Mining Center was inaugurated at Salalah Free Zone, while the cornerstone for the second phase of the project was laid. The center is being developed by Exahertz, a subsidiary of Al Afaq Technology.

H.E. Eng. Said Hamoud Al Ma'awali, Minister of Transport, Communications and Information Technology presided over the inauguration ceremony, which was also attended by H.H. Sayyid Marwan Turki Al Said, Governor of Dhofar.

The investments of the project are estimated at $348 million (about 135 million Omani riyals), and it is the second project of its kind to be implemented in Dhofar Governorate in cooperation between the private sector and the Ministry of Transport, Communications and Information Technology.

In November 2022, Gresen City Company started setting up a large-scale data center for hosting, processing and mining data for various applications, such as distributed ledger technologies, blockchain, and fin tech with an estimated investment of OR 150 million.

Speaking on the occasion, H.H. Sayyid Marwan Turki Al Said, expressed his pleaser of the inauguration of center, lauding the role of Salalah Free Zone in adopting the project which is one of the high value-added technology projects that is expected to contribute to the development of new and innovative technologies.

In a media statement, he said: "These projects provide opportunities for young people to raise their competencies and develop their skills through products related to modern technology. It is important to provide sustainable opportunities for the youth to contribute to projects that enhance technological and economic progress".

Enhancing digital investment

H.E. Eng. Said Hamoud Al Ma'awali, said that the first phase of the project is a reflection of the ministry's dedication to promoting digital investment and integrating advanced technologies within the zone. He further expressed optimism that the company responsible for the project will achieve a quarter of the anticipated production volume before the end of 2023.

Al Ma'awali pointed out the position of company implementing the project and its modern approach towards the development of advanced technologies through the development of artificial intelligence centers. He added that the company uses some wastewater in the Salalah Free Zone to cool the data center in an effort towards the sustainability of the project.

Building a digital economy

For his part, Dr. Ali Mohammed Tabouk, CEO of Salalah Free Zone, underscored the significance of laying down the foundation stone for the Exahertz Blockchain Data Centre

The patron of the event and guests touring the project's photo gallery

an area of 312,000 square metres.

He pointed out: “The project will contribute to solidifying the position of Oman as a leading center in the blockchain technology sector, building a knowledge and digital economy in the country and upgrading it to global levels in line with the vision of «Oman 2040».

Attracting advanced technologies

Jad Kharma, Founder of Afaaq Advanced Technologies and CEO of Exahertz, said: « Revenues expected from the project will be of great value to the Sultanate of Oman, going in line with Oman's Vision 2040. The project will contribute to attracting advanced technologies such as artificial intelligence and cyber security. It aims to transfer these technologies to the Sultanate of Oman and provide opportunities for Omani youth to develop national projects in the field of modern technology and artificial intelligence”.

Kharma clarified that the company was established in cooperation with the Ministry of Transport, Communications and Information Technology, the Authority for Public Services Regulation and other supporting parties in order to invest in the technology infrastructure in the Sultanate of Oman.

The ceremony also included the opening of the pilot facility for the first phase of the hosting, data processing and cryptocurrency mining center project. The attendees viewed the components of the project's photo gallery and the center's facilities, in addition to laying the foundation stone for the second phase of the project.

Attraction of artificial intelligence and cyber security technologies by utilizing young competencies

Dr. Ali Tabouk: The project contributes to solidifying Oman's position as a leading center in the blockchain technology sector

Recent aerial photo of Knowledge Oasis Muscat

200 local and international companies invest in Knowledge Oasis Muscat

Microsoft, Oracle and Motorola are the most prominent global investors

Muscat - الدقم :

The number of companies operating in the ICT sector based in Knowledge Oasis Muscat (KOM) amount to 200 corporates, government and quasi-government institutions.

Eng. Jaafar bin Mohammed Al Ajmi, Director General of Knowledge Oasis Muscat, said that the list of international companies investing in the KOM encompasses important names such as Microsoft, Oracle, and Motorola, in addition to leading local companies in this sector such as ITHCA Group and its subsidiaries, Awasr Oman, Oman Data Park, Azyan Telecom and the Infoline call center.

He further clarified that the volume of investments in the existing projects amounts to about RO 266 million, while the number of workforce in the KOM reached 3958 employees with an Omanisation rate of up to 67%.

Knowledge Oasis Muscat is one of the investment areas managed by The Public Establishment for Industrial Estates (Madayn), and overseen by of The Public Authority for Special Economic Zones and Free Zones (OPAZ).

Raising the efficiency of infrastructure

Eng. Jaafar Al Ajmi also said that Madayn has completed the Ring Road project in the KOM at a total cost of more than RO 6.6 million, explaining that the project aims to raise the efficiency of infrastructure and take in more investment projects in the promising economic sectors such as information technology, telecommunications, knowledge business in

Part of the Ring Road project

One of the buildings in the Oasis

Jaafar Al Ajmi: Raising the efficiency of infrastructure to attract more investments

addition to educational institutions, advanced training centers and other supporting projects.

"This project is planned to transform the Oasis into a more fertile environment for the growth and attraction of investments, enhancing the competitiveness of the Oasis locally and regionally and reinforcing Madayn's vision to provide world-class business cities" Al Ajmi asserted.

New projects

With respect to the new investment projects at Knowledge Oasis Muscat, Eng. Jaafar Al Ajmi said: "There are many new investment projects that have been implemented or are expected to come into operation during the current year, among of which are the satellite communications station with an investment exceeding RO 4 million, and the International School being built on an area of 43 thousand square metres with an investment exceeding RO 8 million. There is also the multi-storey parking building project being built on an area of 12 thousand square meters with a capacity of up to 1,500 parking lots in the first phase and can be increased to 2,500 in the future".

The volume of investments is RO 266 million .. new projects focus on enhancing the competitiveness of KOM

Al Rusayl Industrial City to provide 5G services

Muscat - الدقم:

Al Rusayl Industrial City signed a Memorandum of Understanding (MoU) with the Oman Telecommunications Company (Omantel) to provide all businesses investing in the industrial city with fiber optic network and 5G services.

The MoU aims at elevating telecom services within the industrial city, fostering a conducive environment for businesses to flourish and expedite their manufacturing and production processes. The project is expected to be completed in the first quarter of 2024

The MoU was signed by Eng. Mohsin bin Zahran Al Hinai, CEO of Al Rusayl Industrial City Company, and Eng. Saleem bin Ahmed Abdullatif, Acting VP – Consumer Unit at Omantel.

This MoU aligns with Madayn's commitment to enhancing telecom services for investors across its network of industrial cities. It reflects a dedicated pursuit of delivering exceptional value-added services.

Saleh Al Maamari
Editor-in-chief

Duqm Economic Forum…A promising overlook towards green future

During the Forum, agreements were signed on clean energy, hydrogen, ammonia and green steel projects, which are important to achieve the goals of Duqm to lead change in the green industries sector

The Duqm Economic Forum, which is the first of its kind to be held in the Special Economic Zone at Duqm, reflects the government's obvious efforts in developing and securing the future of green industries, generating clean energy, enhancing Duqm's potentials, taking advantage of its capabilities, integrated infrastructure and service facilities. The government's efforts are also evident in enabling Duqm to establish new alternatives for industrial production methods on clean basis, whose gains are not limited to Duqm only, but include the Sultanate of Oman more broadly.

There are many elements, discussed extensively in the Forum, that enable Duqm to achieve this transformation. Participants stressed the importance of the privileges Duqm enjoy in achieving success in green industries. The allocation of tens of thousands of kilometers by the government for green hydrogen projects near Duqm will contribute to accelerating the implementation of projects to diversify energy sources and transition them to sustainable sources, opening a wide and large door for green investments.

During the Forum, a number of agreements were signed in the fields of clean energy, hydrogen, ammonia and green steel projects. These pacts are important in achieving Duqm's goals to lead change in the green industries sector, and enhance efforts to achieve zero carbon neutrality by 2050. We have received positive responses about the future of Duqm from the attendees; whether CEOs, businessmen, investors and experts, who expressed their confidence in Duqm's ability to achieve these goals.

Finally, Duqm will be an upcoming force with all its various and integrated projects. It will also be the future of clean energy industry and become a precursor to innovating the transformation of new production sectors. It is qualified for this once its planned infrastructure is completed, which will soon contribute to increase the added domestic value and support promising companies through integration with economic zones, free zones and industrial zones.