

TECHNICAL REVIEW

النشرة التقنية - الشرق الأوسط

MIDDLE EAST

Vol 38/Issue Three 2022

Energy Ecosystem

Accelerating the transition

Sustainable Power

MESC's focus for 2022 and beyond

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COLLABORATIONS DRIVING CHANGE

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EDITOR'S NOTE

THIS YEAR'S MIDDLE East Energy showcase proved to be a great success, as confirmed by the organisers, Informa. Technical Review Middle East was glad to meet several advertisers and build valuable contacts at the show. We interviewed Heléne Mellquist, president, Volvo Penta, who reinforced the need for collaborations that build the balance for the future that our children will live in. Please see ps 20-21. The World Utilities Congress is set to take place from 9-11 May in Abu Dhabi, bringing valuable insights on the industry (p 10). On p 28, read about VEGA's latest radar technology for level sensing. The issue also talks about how Bobcat is looking at strengthening its position in the region, through the new loader series (p 34).

At Technical Review we always welcome readers comments to trme@alaincharles.com



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TECHNICAL REVIEW

النشرة التقنية - الشرق الأوسط

MIDDLE EAST

SERVING THE REGION'S BUSINESS SINCE 1984

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US MAILING AGENT: Technical Review Middle East ISSN 0267 5307 is published eight times a year for US\$99 per year by Alain Charles Publishing, University House, 11-13 Lower Grosvenor Place, London, SW1W 0EX, UK. Periodicals postage paid at Rahway, NJ.

POSTMASTER: Send corrections to Alain Charles Publishing Ltd, c/o Mercury Airfreight International Ltd, 365 Blair Road, Avenel, NJ 07001. US Agent: Pronto Mailers International, 200 Wood Avenue, Middlesex, NJ 08846.

Printed by: Buxton Press **Printed in:** April 2022

Arabic Translation: Ezzeddin M. Ali - Email: ezzeddinmali@gmail.com

Arabic Typesetting: Lunad Publicity, Dubai

© Technical Review Middle East ISSN: 0267-5307

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Etihad Rail announces rail freight terminal at Dubai Industrial City

ETIHAD RAIL, THE developer and operator of the UAE's National Rail network, and Dubai Industrial City, one of the region's largest manufacturing and logistics hubs, have announced an advanced freight terminal spread across 5.5 million square feet.

The terminal, which comes as a result of the collaboration between Etihad Rail and Dubai Industrial City over the past years, will contribute to cementing the UAE's position as an international trade hub and boost Dubai's global competitiveness in manufacturing, logistics, transport, trade, and investment. This comes in line with the UAE's Railways Programme, which aims to facilitate trade by connecting the country's industrial and manufacturing centres and opening new trade routes.

The announcement follows Etihad Rail's achievement earlier in March 2022, of completing the connection of Abu Dhabi and Dubai with a direct railway within the 'UAE National Rail Network', in the presence of Sheikh Maktoum bin Mohammed bin Rashid Al Maktoum, deputy ruler of Dubai, deputy prime minister and minister of finance and Sheikh Theyab bin Mohamed bin Zayed Al Nahyan, chairman of the Abu Dhabi Crown Prince's Court and chairman of Etihad Rail.

It marks the start of a new phase of logistic and economic integration between the two emirates, and in preparation for linking the rest of the emirates to an integrated national railway network in the UAE.

The terminal at Dubai Industrial City will deliver a major boost to the UAE's Industrial Strategy, also known as Operation 300 billion. Increasing the industrial sector's contribution to the economy by building advanced logistics infrastructure will strengthen the country's position as the leading Arab nation on the World Economic Forum's Global Competitiveness Report.

Shadi Malak, CEO of Etihad Rail, said, "The terminal will contribute to strengthening the supply chain and freight logistics services, in line with the UAE's efforts to develop the country's transport and logistics sector. With a capacity of 5 million tonnes, the terminal will connect the industrial and manufacturing centres in the UAE, open new trade routes, and support the country's sustainable development."

Hydrogen Rise and Jindal Shadeed Iron & Steel to evaluate landmark trial of green hydrogen at SOHAR

HYDROGEN RISE, JINDAL Shadeed Iron & Steel and SOHAR Port and Freezone have signed an agreement to evaluate the development of the first green hydrogen plant at Sohar, which will decarbonise the steel production process at Jindal Shadeed's steel manufacturing plant.

Together, the partners will assess the potential to produce steel in a completely sustainable manner to reduce emissions, lower the complex's carbon footprint and preserve gas reserves for other applications across the country. After conducting techno-economic feasibility studies, the first phase will include the operation of a 35MW electrolyser capacity by mid-2024, paired with a solar renewable energy plant. Following this first phase, an upscaling path to a potential 350MW electrolysis capacity will be evaluated.

The production of green steel has the potential to provide a huge boost to Oman's industries and economy as the global demand for decarbonised steel products is expected to increase significantly in coming years. Hydrogen Rise, based in Oman and Germany will develop, build and operate the green hydrogen facility at Sohar supplying green hydrogen to Jindal Shadeed's steel manufacturing facility. Jindal Shadeed's expertise in steel production can see the company become an early pioneer in utilising innovative decarbonisation technologies and in substituting natural gas with green hydrogen in the steel manufacturing process to become a major producer in the fast-developing global market for green steel.

Olav Carlsen, CEO of Hydrogen Rise, Oman, said, "We are excited to work with Jindal Shadeed and SOHAR Port and Freezone to evaluate the



Photo Credit : SOHAR Port

The aim is to reduce emissions, lower the complex's carbon footprint and preserve gas reserves for other applications across the country.

development of a step-wise scalable and bankable project for a very innovative decarbonisation process - from a starting electrolysis size of 35MW to a step-by-step ten-fold scaling of 350MW. This approach, plus the very cost competitive renewable energy production in Oman and the commitment to decarbonisation processes here in the country will give all partners a significant competitive edge in the developing global market for green steel. It is no doubt a step in the right direction as we look at ways to decarbonise industries in Oman and their dependency on gas. If successful, this mechanism can be rolled out to industrial zones across the country and around the world."

Sanjay Anand, chief operating officer and head of Jindal Shadeed Iron and Steel in Oman, said, "The range of products that are possible to be produced using this method has the potential to transform the steel industry in Oman."

ACWA Power celebrates excellence of Rabigh 3 IWP project

UNDER THE PATRONAGE of Abdulrahman Abdulmohsen AlFadley, Saudi Arabia's minister of environment, water and agriculture, ACWA Power, a leading developer, investor and operator of power generation, desalinated water and green hydrogen plants, celebrated Rabigh 3 IWP, the world's largest desalination plant.

Located in Saudi Arabia, the project was feted in a ceremony which included senior officials from the Ministry, government officials from the Rabigh governorate and executives from the Saudi Brothers Commercial Company and Saudi Water Partnerships Company.

Developed with Saudi Brothers Commercial Company (SBCC), Rabigh 3 IWP project is the first desalination plant of its size in the private sector. The project has deployed a 100% Saudi



Photo Credit : ACWA Power

Developed with Saudi Brothers Commercial Company (SBCC), Rabigh 3 IWP project is the first desalination plant of its size in the private sector.

workforce and will continue to create new employment opportunities for local talent. It will continue to contribute towards enhancing local content capabilities by utilising local manufacturing to meet relevant needs.



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Briefly

Dubai CommerCity launches e-commerce academy with AstroLabs

DUBAI COMMERCITY THE first and leading e-commerce free zone in the region and AstroLabs, a capability building company committed to strengthening the digital ecosystem of the MENA region, have partnered to launch a dedicated e-commerce academy.

The Dubai CommerCity academy will provide a range of offerings, including training boot camps, webinars, coding hackathons, online courses and internship opportunities with e-commerce companies at Dubai CommerCity. The platform aims to enhance the techno-functional skills of individuals within the e-commerce space and improve the e-commerce talent pool of the UAE.

Commenting on the partnership, DeVere Forster, chief operating officer at Dubai CommerCity, said, "This partnership is an important development for Dubai CommerCity and aligns with our continued efforts to enhance the e-commerce talent pool in the UAE and improve the availability of skilled resources in the emirate's job market. We are pleased to join hands with AstroLabs who will support us in our efforts to transform the UAE into a global hub for e-commerce and reduce the UAE's dependency on global resources."

Roland Daher, CEO of AstroLabs, stated, "AstroLabs has been on a mission of developing the tech ecosystem in MENA for the last nine years and we are excited to partner with Dubai CommerCity to boost the e-commerce industry in the region. Throughout the years, we have trained over 10,000 people and tens of companies in digital marketing, e-commerce, data, and coding. We are committed to creating a platform that will boost the skill development in the digital and e-commerce sector, attract and grow new talent, and contribute to Dubai's vision of becoming the digital capital of the MENA region."

Danielle Blizzard, director of AstroLabs Talent, commented that the skills gap in the market has resulted in businesses struggling to diversify their teams. According to her, the sectors with the highest gap in talent are technology, product, sales and marketing sectors.

GCCA launches global Net Zero Accelerator

THE GLOBAL CEMENT and Concrete Association (GCCA) has launched a series of Net Zero Accelerator initiatives to help national cement and concrete industries decarbonise in line with the GCCA's 2050 net zero global industry roadmap.

The first wave of accelerators will launch in Egypt, which later this year will be the host country for COP27.

Globally, cement and concrete manufacture accounts for around 7% of CO₂ emissions. The plan to eliminate these emissions by 2050 requires all parts of the world to accelerate the reductions in CO₂ emissions. The Accelerator programme will identify the barriers to decarbonisation in target countries and recommend key actions. This includes encouraging government policies that can have an immediate impact.

Thomas Guillot, CEO at GCCA, stated, "Last year our industry made a breakthrough net zero global commitment. Concrete will continue to be the world's most used building material for decades to come, meaning global cooperation between governments and industry is crucial to ensuring net zero targets are met. Our Net Zero Accelerators will offer collaboration and support to a number of target countries to help them decarbonise and align with the global roadmap. I'm proud to launch the first phase of the Accelerator program to assist these nations in embracing greener technologies and work towards a more sustainable future together. I now call on more partners around the world to join us and be part of this movement."

Dr Mahmoud Mohieldin, COP 27 UNFCCC high-level champion of Egypt, said, "Cement and



The first wave of accelerators will launch in Egypt.

Photo Credit : Adobe Stock

concrete will play a critical role in delivering a healthier, more resilient, zero carbon world as the industry moves to rapidly and fully decarbonise. As such, we are pleased to support the Net Zero Accelerator initiative, helping developing countries achieve their decarbonisation targets, as we work to support all industries and countries with their climate ambitions to help build a more sustainable future for all.

The Accelerator programme comprises three elements – net zero national roadmaps including emissions forecasts, reduction levers, policy needs and the industry commitment; identification and funding exploration for large scale carbon cutting 'lighthouse' projects; and policy dialogues with national governments to help accelerate the transition.

The GCCA is partnering with the cement and concrete industry on the ground and will work closely with policymakers, designers, and the construction sector to help overcome procurement and resourcing challenges, as well as demonstrate the business case for greener technologies to be used on a wider scale.

TIER Mobility unveils e-bikes in the Middle East

TIER, EUROPE'S LEADING provider of shared micro-mobility solutions, has launched its first fleet of e-bikes in the Middle East.

Bahrain is the first country in the Middle East to receive TIER's e-bikes, which are now available in prominent locations across Diyar Al Muharraq, complementing the existing mobility offer of TIER's e-scooters.

The introduction of latest generation, high-tech e-bikes is in line with the micro-mobility provider's goal to further create ease in access to sustainable transport methods for first and last mile journeys of residents and tourists. The Delegation for German Industry & Commerce and the German Embassy have provided continuous support to further aid TIER's goal of increasing its footprint in the country.



Bahrain is the first country in the Middle East to receive TIER e-bikes.

Photo Credit : TIER Mobility

Amir Melad, general manager, TIER Middle East, commented, "This is a significant milestone for TIER, and we look forward to further expanding our fleet to provide residents with a safe and sustainable method of transportation."

MENA HSE FORUM 2022

INDUSTRY LEADERS FROM key sectors including oil and gas, construction and tourism will convene along with regulatory authorities for the seventh edition of the MENA Health, Safety & Environment Forum, taking place in Dubai from 6-7 September 2022.

ADNOC, Petrofac, AMAALA, Dubai Municipality, EGA, Saudi Aramco, Abu Dhabi Waste Management Centre - Tadweer and Dubai Holding among others, will deliver keynote presentations to more than 200 stakeholders from the HSE community in UAE, Saudi Arabia, Kuwait, Qatar, Oman and Bahrain.

The MENA HSE Forum is the annual meeting point for MENA regulators, HSE practitioners and solution providers to come together to discuss current HSE developments and define their health, safety and environment strategy for a sustainable future. Attendees will receive insights on all the latest HSE trends and critical new technology, network with peers and industry partners, meet expert suppliers and industry bodies and lay the groundwork to achieve the fundamental HSE targets that matter most to the region.

Khushboo Narang, the conference producer, said, "This industry-leading conference will give unique access to expert analysis coupled with unrivalled business development opportunities in a brand new format, specifically designed to help the GCC's most important organisations embrace and achieve a safe and sustainable future."

Conference agenda

The conference agenda will comprise five sessions:

- Role of HSE leadership in crisis and business continuity management
- Future of digitalisation in the HSE sector
- Process safety and its framework
- Learning from the pandemic and other global transformations about occupational health and behavioural safety
- Sustainable value creation: how ESG moved from a cost centre to a value driver.

Two exclusive breakout workshops will cover the formulation of resilient safety cultures, and digital transformation – from strategy to execution.

Speakers set to present at the MENA HSE Forum 2022 include Tahir Azhibek, corporate HSE manager, ADNOC; Dr Naseem Mohammed Rafee, director of health and safety department, Dubai Municipality; Eng



The HSE Forum returned to a live format in April 2021.

Image Credit: Alain Charles Publishing

Raed Mohammed Al-Marzooqi, manager of studies and system section, health and safety department, Dubai Municipality; Dr Eng Hani Hossni, EHS director, Abu Dhabi Waste Management Centre -Tadweer; Porchelvan Nandanam, corporate manager HSE, Arabian Industries Projects, Salman Abdulla, executive vice president, EHSQ & Sustainability, Emirates Global Aluminium; Porchelvan Nandanam, corporate manager HSE, Arabian Industries Projects; and Dr Essam Hassan, senior environmental consultant, Egyptian Environmental Affairs Agency and KGEES.

Brian Maynard, the HSE director for AMAALA, an upcoming gigaproject part of the Saudi Vision 2030, will be contributing to the MENA HSE Forum's session, 'The Future of Digitalisation in the HSE Sector', elaborating on how his team's approach embeds a range of digital technologies in its approach.

The 4,000 sq km AMAALA development embeds HSE in its core. "The emphasis on the section of the project that is not being developed, approximately 3,700 sq km, is around sustainability and environment, and maintaining that landscape," explained Maynard.

"We can build programmes and strategy, and have a direct link with their on-the-ground implementation of them." Maynard will dissect how companies can implement similar plans while utilising digital technologies to their fullest capability.

On the role of events and conferences such as the MENA HSE, Maynard said, "These events allow all their speakers to spread the word – not just to companies, the industries, the countries and the region.

"At AMAALA, we have a mandate that a large percentage of our health and safety

positions will be fulfilled by local operators and junior staff. We're putting in place programmes to get junior Saudi professionals into operational positions, train them up over the next three to five years, so they are the future leaders of tomorrow."

Saleh Ali Albalushi, HSE director for Dubai Holding Asset Management will present his thoughts on the current and future HSE landscape, drawing upon his experience of handling HSE within a diverse portfolio.

When questioned how important HSE leadership has become to Dubai Holding's operations, Albalushi responded, "When it comes to Dubai Holdings' HSE framework as a group, it is a fundamental part of our operations and the Dubai Vision. We have established a management system for HSE and all our HSE policies are signed off by the CEO – it's an A-TO-Z approach.

"Our mandate and corporate requirement procedures are implemented all across our operations. Its very holistic and relevant to the day-to-day business, starting from the construction phases of projects all the way through to asset management."

In terms of looking ahead at the future, the HSE director continued, "I could see many companies embedding HSE, not just for operational or corporate reasons, but because HSE is evolving. Its become a key part of crisis management in light of the pandemic. Its an important part of business continuity management. Discussions and forums like this will help drive the importance of HSE to businesses."

Please register for the HSE Forum at <https://www.hse-forum.com/mena/conference-brochure>

Byrne showcases range of equipment



Photo Credit : Byrne Equipment Rental

The team was able to demonstrate the efficiency of some of the machines.

BYRNE EQUIPMENT RENTAL, a supplier of rental equipment across the GCC, hosted a 'Product Open Day' in March, at the company's Abu Dhabi facility, located in the heart of Musaffah.

Clients and visitors were invited to view the company's range of equipment that was on display, including diesel and hybrid generators, cargo containers, temporary buildings, hoists and more.

Steve Caygill, regional general manager, UAE and Oman and group head – specialist divisions, said that it has been fantastic to finally host an on-site, in-person event at their facility after almost two years of restrictions due to the pandemic.

"To be able to showcase our equipment to clients in this way is invaluable as it demonstrates our full product offering and

enables our sales team to inform our clients on a more personal level, regarding new products coupled with our existing offering. This has also been a great opportunity to showcase the capabilities of our equipment, for example, our temporary buildings."

"The team prepared a variety of internal configurations to showcase the diversity of the units and we were able to showcase medical facilities, VIP and junior sleeper accommodation, kitchen and catering facilities, mess hall and office setups. This was a great way to demonstrate the diversity of our equipment and our full product offering to both existing and prospective clients and highlight that we offer a 360-degree service – we are the single source solution for equipment rental across the entire GCC," he added.

The outdoor display of equipment was designed as a walkthrough, enabling clients to walk freely around the site and view the items up close and personal. Refreshments were served inside one of the temporary building units which had been set up to showcase a mess hall, enabling visitors to experience the product in its entirety. Furthermore, clients also had a chance to try out some of the equipment as the team was able to demonstrate the efficiency of some of the machines, namely the Hoists and Mast Climber, showcasing the ease of access for servicing and the benefits of the units.

Steve observed that the 'Open Day' was a great success and presented a fantastic opportunity to network with new and existing clients, showcase equipment rental solutions and build momentum for a busy year ahead.

Forum explores region's need for more reliable energy storage options

AS THE WHOLE region continues to create and develop renewable energy initiatives and programmes, a large part of their attention has now been directed to the potential offered by storing produced energy, which could successfully result in the deployment of uninterrupted electricity.

This was the general opinion raised by some of the world's leading experts in the field of energy in an event, as part of the Expo 2020 Dubai, focused on exploring the potential role of grid-scale energy in the efforts to enable the effective use of renewable energy resources. The event, entitled 'Energy Storage Forum,' is the result of a strategic collaboration between the Gulf Cooperation Council Interconnection Authority (GCCIA), a joint stock company and the Electric Power Research Institute (EPRI),

an independent, non-profit energy research and development organisation.

According to GCCIA senior officials, battery storage complements like lithium-ion batteries are now being seen as a highly feasible solution to the Middle East's quest for promising energy storage technologies. This can also be attributed to the decreased cost of lithium, longer storage capabilities and lifetime expectancy.

In his welcome address, Ahmed Al Ebrahim, CEO, GCCIA, said, "The need to discover energy storage solutions is a common goal shared by both the GCCIA and EPRI—we should seriously consider this and this event will allow us to learn more and address the challenges of energy storage."



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EXECUTIVES' CALENDAR 2022

MAY 2022

9-11	World Utilities Congress	ABU DHABI	www.worldutilitiescongress.com
30 May-2 June	HANNOVER MESSE	HANNOVER	www.hannovermesse.de
30 May-3 June	IFAT	MUNICH	www.ifat.de

JUNE 2022

25-28	The Big 5 Construct Egypt	CAIRO	www.thebig5constructegypt.com
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SEPTEMBER 2022

20-25	IAA Commercial Vehicles	HANNOVER	www.iaa-transportation.com
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OCTOBER 2022

18-20	WETEX & Dubai Solar Show	DUBAI	www.wetex.ae
24-30	bauma	MUNICH	www.bauma.de

Readers should verify dates and location with sponsoring organisations, as this information is sometimes subject to change.

Bringing together power and water leaders for World Utilities Congress 2022

DELIVERING INTEGRATED TRANSFORMATION for power and water utilities, the World Utilities Congress, hosted by TAQA will provide an unrivalled platform to explore the latest products, innovations and technological advancements across the global utilities landscape. Scheduled to take place from 9 - 11 May 2022 in Abu Dhabi, it will bring together power and water leaders to provide insights on building resilient low- carbon business models with agile automated digital operations. The increasing demand for energy services is paving the way for a new energy ecosystem. The power and water industry, particularly in the MENA region, will witness unprecedented multi-billion dollar investment opportunities over the next decade.

The strategic conference will focus on themes such as decarbonisation and energy transition, collaboration and strategic partnerships, custom-centric business models, digital transformation and technological innovations; and global industry dynamics. The opening session will revolve around power and water security and how the government can improve their policies, regulations and market designs that will aid the development of the utilities sector while keeping on track with their decarbonisation goals.

The panel sessions will discuss strategies for the successful decarbonisation of water and power markets as there is a rising power and water demand. Although renewable energy is becoming more affordable and competitive, its intermittent nature poses significant implementation challenges. It will also discuss the role of new technologies in energy transition and how they can help improve efficiency and decrease emission. The session will highlight the strategies government leaders are using to future proof their national water and power sectors. There will also be an industry debate on integrated versus non-integrated utility and if the future



Photo Credit: Adobe Stock

The strategic conference will focus on decarbonisation and energy transition.

holds enough room for both business models or will one of them take over completely.

The event will shine the spotlight on the UAE's nuclear power journey, debating topics such as what it will take for hydrogen to become the low-carbon champion. They will discuss on the efficient integration of renewable energy into power grids. Ensuring cyber security of the entire utilities value chain, the conference will address psychological mechanisms employed by cyber criminals and give suggestions on how utilities and their customers can remain more vigilant.

There will be discussions on the integrated transformation of power and water utilities and the drivers of change reshaping the industry.

www.worldutilitiescongress.com

ON THE WEB

A round up of the leading developments and innovations recently featured on *Technical Review Middle East's* online portal. To read more or to stay up to date with the latest industry news, visit www.technicalreview.me

Qatar, Egypt agree on investments, partnerships worth US\$5bn

QATAR AND THE Arab Republic of Egypt have agreed on a set of investments and partnerships in Egypt, totaling US\$5bn in the coming period. The meeting dealt with a review of bilateral relations between the two brotherly countries and the importance of strengthening cooperation and coordination between them in various fields.



Photo Credit : Adobe Stock

Qatar, Egypt join hands on investments.

<https://technicalreviewmiddleeast.com/business-a-management/>

Schneider Electric introduces digital solutions for building transformation

SCHNEIDER ELECTRIC EGYPT had organised a one-day event at the Hilton Heliopolis Hotel, entitled 'Innovation Day: Buildings of the future' for all its stakeholders in the buildings industry including consultants, contractors, panel builders, eco-experts and end users. During the event, Schneider Electric's experts explained the effect of global energy waste due to the mismanagement of buildings and how its full suite of cutting-edge technology will enable better interactions with buildings throughout their lifecycles. They also highlighted the negative impact of bad designs on the safety, emotional and mental health of individuals, especially with the consideration that nearly 90% of people's time is spent indoors.

<https://technicalreviewmiddleeast.com/events/eventnews/>

Aldar and Louvre partner to launch Louvre Abu Dhabi Residences

ALDAR PROPERTIES, ONE of the UAE's largest real estate development and asset management companies, together with Louvre Abu Dhabi, a premier global cultural institution of the Middle East, have announced a world-first partnership to launch the Louvre Abu Dhabi Residences.

Located within Saadiyat Grove and featuring unparalleled views, designs, spaces, amenities and services, Louvre Abu Dhabi Residences will be the most sought-after address in Abu Dhabi once handed over to residents in 2025. Louvre Abu Dhabi Residences will feature only 400 apartments including exquisite studios, one, two and three bedroom apartments and five exclusive penthouses.

This is the first time that Aldar will launch a new development with a primary focus on international sales. Buyers are to be targeted in markets such as the UK, Egypt, and India.

<https://technicalreviewmiddleeast.com/construction/buildings/>

DHL Global Forwarding unveils GoGreen Plus Service

DHL GLOBAL FORWARDING, the air and ocean freight specialist of Deutsche Post DHL Group, has expanded its GoGreen Plus Service to provide real emissions reductions through carbon insetting.

After successfully introducing the GoGreen Plus Service for ocean freight, customers can now also easily neutralise their CO₂ emissions for air freight on all trade lanes.

Following the one atmosphere approach, emissions are reduced by replacing the amount of conventional fossil fuel needed with sustainable fuel. Customers can easily pick and choose which parts of their supply chain they want to truly decarbonise.

The GoGreen Plus Service can be easily added while booking online. <https://technicalreviewmiddleeast.com/logistics/>

Equinix to build first data centre in Salalah, Oman

EQUINIX HAS ANNOUNCED plans to build a new data centre in the city of Salalah, which is located on the south coast of the Sultanate of Oman in the Middle East. The data centre is being built in cooperation with Omantel, the regional leading wholesale carrier of the Middle East, and will be commercially and operationally managed in full by Equinix as a carrier neutral and open access Equinix IBX data centre.

<https://technicalreviewmiddleeast.com/business-a-management/>



Photo Credit : Equinix

Talal Al Mamari, CEO, Omantel.

Pulse revolutionises EV charging stations

EXPANDING UPON THE national sustainability drive, Pulse, a UAE-based smart-mobility solution provider, is deploying a spectrum of fast electric vehicle (EV) chargers across Abu Dhabi that will take 15-75 minutes to charge an average range of 400km. Residents of Abu Dhabi can find the Pulse EV charging stations at their community Mawaqif parking lots located near parks, cafes, restaurants and key places of interest.

<https://technicalreviewmiddleeast.com/logistics/automotive/>



Photo Credit : Pulse

Pulse to deploy EV chargers across Abu Dhabi.

“Data continues to proliferate at enormous scale, proving integral to business success and in highlighting data protection and resiliency requirements. Khazna Data Centres implements numerous ways to implement data centre design and contribute to optimum performance. The Uptime Institute Tier III certification awarded to our Apollo facilities is a testament of confidence that we offer our customers and partners with reliable and secure data centre capabilities, both in terms of operation as well as IT infrastructure.”

HASSAN AL NAQBI

CEO

Khazna Data Centres

“UAE entities are expected to invest up to US\$7bn in India's food sector in the next three years, as part of the UAE-India food corridor that aims to secure the UAE's food security and invest up to US\$5bn in mega food parks and similar facilities in various Indian cities, and up to US\$2bn in contract farming, sourcing of agro commodities and related infrastructure.”

SANJIV BAJAJ

President designate

Confederation of Indian Industry

“Renewable energy plays an important role as urgency grows to align with 2050 net zero goals. Over the last ten years, the MENA region has made incredible progress by doubling its installed renewable capacity. Seizing the economic opportunities presented by the energy transition in this region will drive diversification, sustainable development, prosperity and job creation.”

FRANCESCO LA CAMERA

Director-general

International Renewable Energy Agency

“French ports are among the most important commercial gateways to the European continent

as a result of their strategic location at the centre of the northern Mediterranean coasts. There is no doubt that our cooperation with them will contribute to increasing the reach of our 'Made in the UAE' products to the European markets, which are considered one of the most important high-value consumer markets in the world. This is one of the most important objectives of the 'Year of the Fiftieth' projects that focus on increasing the number of national exports worldwide.”



Photo Credit: Ministry of Energy and Infrastructure

CAPT ABDULLAH AL HAYYAS

Director of maritime transport affairs

Ministry of Energy and Infrastructure, UAE

“The IsDB Group has committed at least 35% of all its financing to climate-friendly projects by 2025. This is at the core of our strategic objectives aligned with building resilience and driving green economies accentuated by building sustainable infrastructure and promoting inclusive human capital development.”

DR MUHAMMAD AL JASSER

President

Islamic Development Bank Group

“Miami and Dubai have incredible potential for increased global business, and that's why we are so thrilled by our presence in Dubai. Miami and Dubai are two surging young major cities with fast-changing skylines, major global investment, and incredible cultural diversity.”

FERNANDO ARENCIBIA JR

Chairman of the board

MIAMI Association of Realtors

“Building business relations and partnerships has helped us grow more and strengthened our position as a leader in automation and intralogistics software and hardware solutions in the region. We look forward to our association with ILA, as this will facilitate sales of our automated packaging machines. The MENAT region has been embracing modern technologies rapidly, as we've witnessed since the pandemic, and we will continue to introduce our world-class solutions, in order to support and take the industry a step forward, as well as meet the needs of consumers.”

ALAIN KADDOUM

Managing director

Savoye Middle East

“The GCCIA understands the extremely significant role played by energy storage, which is a fast changing asset class in the world's electric power systems. In line with this, we are co-hosting with EPRI the 'Energy Storage Forum' – a strategic forum where we can discuss the latest global trends and innovations in energy storage and the associated opportunities and challenges.”



Photo Credit: GCCIA

ENG AHMED AL EBRAHIM

CEO

GCCIA

“The wood industry is growing at a rapid pace. With technological advancements, online distribution channel for wood products have become convenient. Additionally, urbanisation has added to the demand for wooden furniture products. Changing lifestyles, tastes, and preferences for different kinds of wood furniture is escalating the growth in the industry.”

DAWOOD AL SHEZAWI

President

Strategic Conferences and Exhibitions (organisers of the Dubai WoodShow 2022)

“The past year has been marked by global uncertainty around key issues such as climate change and rising commodity prices, but we are seeing an increase in economic optimism in the UAE - people trust they will be better off in five years' time.”



Photo Credit: Edelman Middle East

OMAR QIREM

CEO

Edelman Middle East

“We believe that green hydrogen will play a critical role in the energy transition. Egypt is uniquely positioned to provide low-cost renewable energy, access to export markets, and track record of hosting large scale projects with available talent, services, and infrastructure. We are eager to be part of Egypt's success story in the energy transition ecosystem.”

TANER SENSOY

CEO

Mediterranean Energy Partners

“Hutchison Ports Sohar is one of SOHAR's biggest success stories and we are delighted with the progress the company has made. The new facility in the terminal will be vital in attracting world class tenants to the complex and improving customer experience and satisfaction. This will continue to create an environment where business can thrive and contribute to the ongoing development of the national economy.”

MARK GEILENKIRCHEN

CEO

SOHAR Port

(On the start of construction of the new solar-powered integrated inspection facility project at Hutchison Ports Sohar)

“Current events demonstrate that energy policies need to deliver affordable and reliable energy supplies to withstand supply shocks and other challenges. We have witnessed how lower winds in Europe impacted wind generation and how conflict created oil and gas supply and price shocks. The world must account for such challenges while delivering reductions in carbon emissions because an energy transition without energy security will not succeed.”



Photo Credit: Crescent Petroleum

MAJID JAFAR

CEO

Crescent Petroleum

(Speaking at the Atlantic Council Global Energy Forum)

“We recognise that energy security is paramount for billions of people around the world, which is why we continue to make progress on

increasing our crude oil production capacity, executing our gas expansion programme and increasing our liquids to chemicals capacity. We are also investing in CCS, renewables and low-carbon hydrogen production – supporting the global energy transition and advancing our net-zero ambition.”

AMIN H NASSER

President and CEO

Aramco

“With the guidance and support of HRH Crown Prince Mohammed bin Salman, we are working to make significant global impact through our businesses, projects and our subsidiaries. We welcome new investors and partners to collaborate with us through ENOWA and to help create a circular economy at scale powered by 100% renewable energy and with abundant water for residential and commercial needs. ENOWA's innovative approach will create the blueprint for new, sustainable industries in Saudi Arabia whilst creating a vibrant economic sector. As a trendsetter, ENOWA will become the benchmark for integrated sustainable energy, water and hydrogen systems and extend its approach to other industries to grow the sustainability marketplace both in the region and abroad.”

NADHMI AL-NASR

CEO

NEOM

(On the launch of NEOM's subsidiary company ENOWA)

“As a result of the global water shortage, water is becoming an increasingly valuable commodity. We foresee the uninterrupted supply of clean water for drinking, agriculture, and industrial practices as one of the greatest challenges in the future, and aim to offer tailored solutions to tackle it.”

RISHI BHOJWANI

Service director

Wilo MENA

AI runs chemical plant for 35 days

The field test confirmed that reinforcement learning Artificial Intelligence can be safely applied in an actual plant.

YOKOGAWA ELECTRIC CORPORATION and **JSR Corporation** announced the successful conclusion of a field test in which AI was used to autonomously run a chemical plant for 35 days, a world first.

This test confirmed that reinforcement learning AI can be safely applied in an actual plant, and demonstrated that this technology can control operations that have been beyond the capabilities of existing control methods and have up to now necessitated the manual operation of control valves based on the judgements of plant personnel.

The initiative was selected for the 2020 Projects for the Promotion of Advanced Industrial Safety subsidy programme of the Japanese Ministry of Economy, Trade and Industry.

Control in the process industries spans a broad range of fields, from oil refining and petrochemicals to high-performance chemicals, fiber, steel, pharmaceuticals, foodstuffs and water. All of these entail chemical reactions and other elements that require an extremely high level of reliability.

In this field test, the AI solution successfully dealt with the complex conditions needed to ensure product quality and maintain liquids in the

distillation column at an appropriate level while making maximum possible use of waste heat as a heat source. In doing so, it stabilised quality, achieved high yield and saved energy.

Masataka Masutani, general manager of production technology at JSR, commented, "In an environment that is changing due to factors such as the fully-fledged introduction of 5G and other developments towards a digital society, as well as the aging of the human resources who ensure plant safety and a lack of human resources to replace them, the petrochemical

The AI solution successfully dealt with the complex conditions needed to ensure product quality and maintain liquids at an appropriate level.



Photo Credit : Yokogawa

Distillation columns at the JSR chemical plant.

industry is under strong pressure to improve safety and efficiency in its production activities by utilising new technologies such as IoT and AI."

Takamitsu Matsubara, associate professor at NAIST, remarked, "The reinforcement learning AI FKDPP algorithm was jointly developed by Yokogawa and NAIST in 2018 to realise autonomous control in chemical plants. Despite having to refer to a large number of sensors and control valves, the AI can generate a robust control policy in a limited number of learning trials."

Yokogawa Electric vice president and head of Yokogawa Products Headquarters, Kenji Hasegawa added, "The success of this field test came from bringing together the deep knowledge of the production process and operational aspects that only the customer can provide, and Yokogawa's strength of leveraging measurement, control, and information to produce value." ■

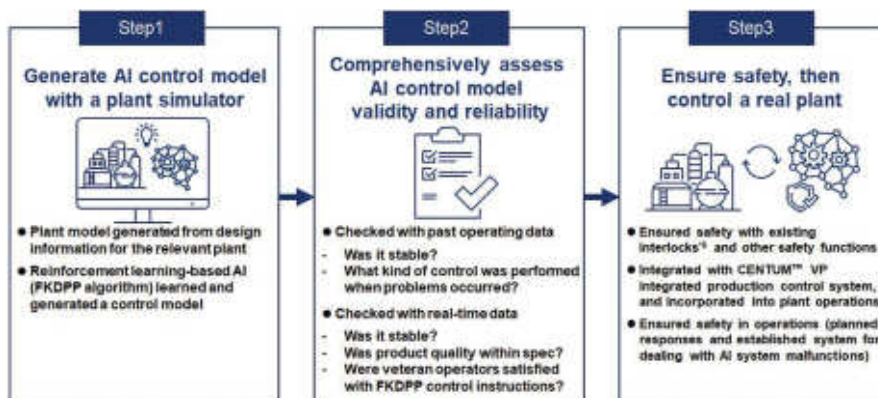


Photo Credit : Yokogawa

Ensuring safety in the plant operations.

Enabling the Middle East's sustainable transformation

Chandra Dake, founder, Dake Rechsand, outlines strategies for water conservation and efficient food systems in the Middle East.

AT THE RECENT COP26 climate summit in Glasgow, governments promised to boost efforts to achieve environmental sustainability, in response to the increasing climate change impacts such as droughts, hurricanes, and wildfires. However, commitment to climate promises does not just require the availability of plans to switch to clean energy and reduce emissions, it also requires the existence of methods to do so. And achieving efficient food systems and conserving water are pivotal to this sustainable transformation.

Many countries are making a variety of efforts in the field of environmental preservation, with Saudi Arabia and the UAE leading the way in taking concrete steps towards reducing greenhouse gas emissions (GHG). Today, with food scarcity set to deepen with pandemic-related disruptions, the need to align climate actions with the agricultural sector is greater than ever.

Establishing the priorities

Transitioning to low-carbon agricultural practices and optimising the value chains in the region will be significant for establishing climate-resilient food systems. Plausible solutions must touch upon reducing GHG emissions, saving water, retaining the supplied water, and improving the ecology. To this end, many nations are exploring climate-smart water management, policy reforms, and effective demand-supply allocation mechanisms. Such actions are being prioritised by nations such as Jordan, where the pandemic has aggravated water scarcity and led to high demand and costs.

Restorative agriculture

Restorative agriculture, defined as the reclamation of degraded land by developing green cover, has the potential to create land suitable for food production. This strategy posits permaculture and food forests as potential solutions for land remediation in deserts. Breathable Sand, which finds application in water-efficient desert farming, could enable synergistic systems such as food forests. In the long run, such models could help meet the food requirements of the local population, which is set to increase. In the meantime, the increased green cover could add to carbon sequestration and help mitigate climate change.

Desert farming

Innovative solutions such as Breathable Sand are fit-for-purpose in desert farming, which requires addressing a host of geographical and climatic deterrents such as seepage, high evaporation, salinity, etc. Thanks to its air permeability and water retention properties, Breathable Sand enables practitioners to conserve up to 80% of water compared to conventional farming and simultaneously unlock high agricultural productivity due to optimal nutrient supply to the roots.

Dake Rechsand's breathable sand technology that transforms barren desert sand into high-yield, arable land, along with its signature IDER water-harvesting range, is empowering desert farming and water conservation.

The efficiency, resilience, and productivity of the agriculture sector and food systems have substantial social, economic, and political correlations. And with increasing consensus for sustainability and climate actions, as evident from the recently concluded COP26, stakes have been raised. So, the MENA region, with its long-standing food and water woes, must ramp up its efforts by adopting plausible tech-driven solutions. The rate of adoption could define the course of its future. ■



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Middle East Energy facilitates whopping business deals

More than 600 exhibitors from 80 countries participated in the show.

INFORMA, THE ORGANISERS of Middle East Energy confirmed that the event facilitated business deals worth more than US\$705mn during the three-day energy showcase, which took place from 7–9 March at the Dubai World Trade Centre.

Welcoming attendees back to the live, in-person format for the first time since 2020, 20,331 trade and buyer visits took place, with more than 600 exhibitors from 80 countries providing an insight into the latest energy innovations while 113 expert speakers outlined how to develop a diverse, digitised and sustainable future.

The event, formerly known as Middle East Electricity, focused on five key sectors, including Transmission & Distribution, Smart Solutions; Renewable & Clean Energies; Backup Generators & Critical Power; and Energy Consumption & Management, each providing the necessary tools to understand more about energy alternatives and solutions, including digitalisation, solar, wind and hydro energy solutions, among others.

Azzan Mohammed, exhibition director, Global Energy & Utilities Forum and Middle East Energy, said, “This year’s event has been a resounding success which has seen key energy industry players come together to network and do business while also providing a platform to discuss how we adapt and adopt new strategies to make the energy transition a reality.

“There has been clear pent-up demand within the industry to get back to meeting in person, which is reflected in the 40% increase in visits and the volume and value of deals signed.”

Azzan Mohammed, exhibition director, Global Energy & Utilities Forum and Middle East Energy.



The event took place from 7–9 March at the Dubai World Trade Centre.

“There has been clear pent-up demand within the industry to get back to meeting in person, which is reflected in the 40% increase in visits and the volume and value of deals signed. This also serves as a timely reminder of the drive from the sector to achieve sustainable growth while reducing emissions,” he added.

Held under the patronage of HH Sheikh

Mohammed Bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, Middle East Energy was hosted by the UAE Ministry of Energy & Infrastructure.

The event played a fundamental role in providing a series of thought leadership sessions and discussions around solutions for meeting the energy shift.

Through the Global Utilities and Energy Forum, 3,500 delegates had the opportunity to participate in high-level strategic panels, technical sessions, roundtable discussions and workshops. The focus centred on developing a roadmap to decarbonisation and provided insight into the energy systems of the future, the green hydrogen opportunities in the MENA region, funding of the energy transition, the rise of sustainable finance, powering the African continent with renewable energy, grids of the future, energy efficiency focus and decarbonising industries.

The forum was complemented by the Intersolar Middle East Conference and the Technical Hub, where visitors had the opportunity to learn more about industry best practices across key pillars of the energy sector, including Digitalisation and Smart Grids, Renewables, Green Hydrogen, and Energy Storage, and photovoltaics, PV production technologies and solar thermal technologies.

International participation also witnessed a spike in participation, with 139 countries represented through visitor and exhibitor participation. Exhibitors from Saudi Arabia, Nigeria, Egypt, France, Germany, Italy, China, the United Kingdom and the US presented their latest advances in the energy sector. At the same time, Algeria, Morocco, Kenya, Lebanon, Iraq, and Jordan provided representation from the MENA region.

Some of the innovations being showcased included those from Swiss-headquartered Statron, which also have regional headquarters in Dubai. The company showcased the world's first mobile energy storage system for the heavy-duty sector.

UNITED ARAB EMIRATES
MINISTRY OF ENERGY & INFRASTRUCTURE



HE Yousif Al Ali, assistant undersecretary for the Electricity, Water and Future Energy Sector at the UAE Ministry of Energy and Infrastructure, at MEE.

Photo Credit : Middle East Energy 2022

The forum was complemented by the Intersolar Middle East Conference and the Technical Hub, where visitors had the opportunity to learn more about industry best practices across key pillars of the energy sector.

The emost Butler S provides a better price/performance ratio, has no CO₂ emissions and is easy to transport and use. One of the main advantages is zero noise emissions, meaning the battery storage system can be used indoors and outdoors and in built-up environments without causing disturbances.

Other exhibiting companies included Lucy Electric, Jubaili Bros, Ducab, Rittal, Volvo Penta, NAFFCO.

During the event, Ras Al Khaimah Municipality announced the launch of the first RAK Energy Summit, which will take place in October and bring together international and regional experts and leaders from the government and the private sector to discuss emerging trends and initiatives in the field of sustainable energy.

The French marine and power generation diesel and gas engine manufacturer, Baudouin, signed an MoU with Power Solutions International (PSI). The agreement will see the company expanding its product range, offering the PSI rich burn gas engine range to the European, Middle Eastern and African markets.

This year's event sponsors were Perkins, Baudouin, Newage Stamford AVK, and Riello UPS.

Middle East Energy returns to the Dubai World Trade Centre from 6 – 8 March 2023. ■

For more information, log on to www.middleeast-energy.com

Photo Credit : Middle East Energy 2022



Decarbonising energy-intensive industries was the focus of the Global Energy and Utilities conference.

Enduring commitment to sustainable growth

Rasso Bartenschlager, general manager, Al Masaood Power, talks to *Technical Review Middle East* about the organisation's collaborative efforts for eco-friendly power in the region.

**Technical Review Middle East (TRME):
What are Al Masaood's initiatives for the advancement of net zero goals?**

Rasso Bartenschlager (RB): Global efforts to reduce carbon emissions have been in full swing over the recent years and the Al Masaood group continues to implement strategies aligning with the changes that come with this development.

We look at reducing our carbon footprint in three ways. Our internal strategies, those of our suppliers or vendors and what we offer our clients.

Our internal strategy includes reducing energy consumption as well as using the right energy. For instance, many of our buildings are close to being 100% LED-operated and the possibility of using solar panels in our facilities.

Al Masaood Power's commitment has endured over decades, to provide outstanding power solutions and service operations to industries including power generation, marine and oil and gas. The portfolio of our global partner Volvo Penta's new power generation engines exhibited at the Middle East Energy 2022 event, reflects our direction at Al Masaood Power Division to promote and push for more eco-friendly power solutions in the local and regional markets. During the Middle East Energy show, we showcased the latest additions to Volvo Penta's engine range – the new D13 power node and the compact and powerful D8 engine, known for their reduced emissions, energy efficiency, low fuel consumption and low noise levels.

We have always demonstrated our relentless efforts to address demand in the UAE for cleaner energy and a more sustainable power supply.

Further, sustainable solutions such as hydrogen and solar panels are a big part of Al Masaood's future initiatives.

TRME: What are Al Masaood Power's strategies for hydrogen?

RB: We are interested in the complete



Rasso Bartenschlager, general manager, Al Masaood Power, at Middle East Energy 2022.

Photo Credit : Al Masaood Power

supply chain of hydrogen, including production, storage and consumption. For hydrogen and solar solutions, we are looking at international partners, as well.

Al Masaood Power Division holds the distinction of launching the first hydrogen propulsion system in the UAE. The maritime sector is integral to Al Masaood's continued growth.

TRME: What are Al Masaood Power's plans for expansion in the region?

RB: We are always in search of ways to provide greater value to the region.

As part of our future initiatives, we are looking at the overhauling and repairing of electric motors for the increasingly popular electric vehicles and other applications, in partnership with Leroy-Somer.

TRME: What do you think is the scope of hybrid systems of power generation in the Middle East?

RB: Hybrid systems are a step closer to carbon neutrality and efficient power production. However, it is important that all the different sources of power in hybrid systems communicate with one another and are integrated as a single unit. ■

MEE addresses need for decarbonising energy-intensive industries



Photo Credit: Adobe Stock

The UAE is expected to require new investments in clean energy sources to achieve its carbon-neutral 2050 pledge.

DECARBONISING ENERGY-INTENSIVE INDUSTRIES was the focus of the Global Energy and Utilities Conference at Middle East Energy, which concluded on 9 March 2022, following three days of discussions by policymakers, business leaders and industry experts from the energy industry.

The session on 'Decarbonising industries' addressed the critical need for decarbonising energy-intensive industries to successfully meet carbon reduction programmes and net zero targets. The UAE is expected to require new investments of US\$164bn in clean and renewable energy sources to achieve its carbon-neutral 2050 pledge.

Discussing Saudi Arabia's net zero targets announced in October last year when the country committed to cutting carbon emissions to zero by 2060, Turki Al Shehri, chief executive officer – Saudi Arabia, ENGIE, reiterated his confidence in achieving these goals. He said, "If you look at the entire value chain in terms of public and private companies and regulations, they are all aligned towards the net zero objective. I believe the objective could be achieved in advance, with the way things are moving forward."

Discussing the use of technology in the here and now, and the opportunities to decarbonise already available to many, Salim Mousallam, executive director - decarbonisation strategy & partnerships, GE Gas Power EMEA, said, "Today, 40% of CO2 emissions from around the world come from power generation so we cannot ignore that we have to do something. For power plants, there are multiple solutions to decarbonise and achieve net zero.

"At GE, we have been burning hydrogen for about 30 years, so the technology is there. However, the only issue is when you look at the energy trilemma, you need sustainability, reliability and affordability, so until you have the right economy and the infrastructure to support hydrogen, which can take years, we have to look at both pre and post-combustion. Carbon capture is critical as it is something we can do today.

"If we have the right policies and incentives, we already have the solutions so we can start decarbonising today rather than waiting for the perfect solution in 10-15 years."

Other speakers on the panel included Alexandre Eykerman, managing director and energy business director, Wartsila, Dr Chet Biliyok, technical director – new energy services, Petrofac; Ali Zerouali, head of cooperation and international development, Masen and Sergio Lopez Perez, international relations senior specialist, department of energy, Abu Dhabi.

At the Intersolar Conference of the Middle East Energy conference, for energy storage and the rapid evolution of technology, the discussion centred on how the market is shifting and adapting as power generation, distribution, and storage technologies open new possibilities. The importance of understanding the market, recognising the supply chain and understanding the key players, as well as the ample opportunities for further investment and growth were underscored.

MEE has been an essential part of the Middle East's economic expansion, connecting business and introducing new products to the region.



Photo Credit : Volvo Penta

Heléne Mellquist, president, Volvo Penta.



Photo Credit : Volvo Penta

Volvo Penta together with its partner AI Masaood Power Division, showcased the latest additions to its engine range at the Middle East Energy 2022.

'We ensure success of the industry for future generations'

At the Middle East Energy 2022, Heléne Mellquist, president, Volvo Penta spoke to Technical Review Middle East about the company's focus on alternative fuels, commitment towards sustainability and plans for the region.

Technical Review Middle East (TRME): How important are alternative fuels in Volvo's product portfolio?

Heléne Mellquist (HM): Volvo is creating a new energy ecosystem, working with new partnerships and joint ventures, carving new business areas and making investments, to enable the transformation towards carbon- neutrality.

Our focus on alternative fuels involves three broad segments. Battery electric solutions depending on different applications; hydrogen-based fuel-cells in collaboration with cellcentric; and CO₂- neutral fuels which offer several options including hydrogenated vegetable oils, synthetic diesels, hydrogen technologies and others.

One great example of the partnerships that the Volvo group has entered into is that of investing in a network for fuelling, in Europe.

TRME: How important is sustainability for Volvo Penta?

HM: The environment has been a core value of the Volvo story for decades. One and a half years ago, the Volvo group decided to adhere to the Paris agreement, and that was a game-changing decision and all the investments that we make now are aligned with that.

I believe that we should create the balance for the future that our children will live in.

At Volvo Penta, we are greatly committed to sustainability, and it is reflected in all our partnerships and investments. Together with our customers, it is our objective to ensure that the industry is successful, for future generations.

Volvo Penta genset engines are used around the globe for numerous applications from electrification to vital power sources for new construction activities and disaster

response. We are looking at being carbon-neutral by 2040. While we are making huge investments in transforming our entire portfolio to support this transition, we are also completely dedicated in offering support to our customers for combustion engines, by providing more fuel-efficient and better productivity through solutions suitable for their needs.

Volvo Penta is committed to continuing to improve today's engines to become even more efficient and reliable. Over the last few years, the company has introduced not only the full Stage V range for mobile gensets; the D8, D13, and D16, but new additions too, to the Volvo Penta genset engine family.

The new compact and powerful D8 engine is a great fuel-efficient addition to the company's current power offer.

Volvo Penta's D13 500 kVA gives full

power output the second it starts up – an essential feature for a backup genset, particularly for those being used in emergency/standby operations. The D13 500 kVA has a fuel-saving of 4-5%, compared to previous models. This is, in part, due to the quality and viscosity of the lubrication oil influencing the internal friction in the engine, which plays a vital role in fuel consumption.

we are playing a key role in the advancement of decarbonisation goals.

TRME: Would you like to shed some light on the aftersales support that Volvo Penta offers for customers in the region?

HM: Volvo Penta is committed to supporting our customers every step of the way with strong aftermarket support. We have the best support for service and the availability of parts in the region. Ensuring that parts are readily available is important in offering seamless service.

Striving to create quick value for customers is a key area of Volvo Penta's ethos – with a focus on total cost of ownership (TCO), especially when it comes to reducing fuel consumption.

Through our partner Al Masood, we are well represented in the UAE and have a warehouse in Dubai to ensure

availability of parts.

We offer local support through training facilities to develop well trained mechanics, who are capable of making the right diagnostics and in offering preventive maintenance solutions.

Combined with digitalisation, there is huge potential in the region to make preventive maintenance much better. For example, if we are connected with an engine in an irrigation facility somewhere in the desert, we can monitor and plan the change of parts and the circuit times, delivering more productivity to customers. And we are not far from that.

We are also looking at the rentals market, which will be good from a sustainability point of view and in securing uptime, too. So, there are many changes that can be accelerated for the region. ■



TRME: What are Volvo Penta's plans for the Middle East region?

HM: We believe in being close to our customers and maintaining a constant interface. The decarbonisation goal is more comprehensive than anything else that has happened so far in the industry.

For the Middle East and Africa region we have a lot of plans for expansion, and Middle East Energy has been an excellent platform for interesting conversations.

Through our active support of the region's sustainability and environmental ambitions,

Volvo Penta strengthened its generation engine portfolio with the D13 power node, the TAD1346GE 500 kVA.

Photo Credit : Volvo Penta

Powering change

At this year's Middle East Energy exhibition in Dubai, Eng Ammar R Qari, general manager – sales and marketing, Middle East Specialized Cables Company discussed the focus for 2022 and beyond with *Technical Review Middle East*.

Technical Review Middle East (TRME): What is the main area of focus for MESC in 2022?

Eng Ammar R Qari (ARQ): Middle East Specialized Cables Company (MESC) is one of the leaders in the region for high quality cables, supporting projects in the Middle East and worldwide since 1993.

We have facilities in Saudi Arabia and the UAE, manufacturing cables for diverse sectors including oil and gas, construction, utilities as well as renewable energy.

Last year, we expanded into the production of higher sizes of power cables. The main focus for MESC this year is to introduce our products and participate in the utilities sector. We have already received approvals for ADNOC, along with our complete range being approved by DEWA, FEWA, SEWA and other major utilities in the region.

During the lockdown, when the market was experiencing a downturn, we directed our efforts towards improving our facilities, getting certifications and approvals, so it has

been a productive time for us.

TRME: What is your outlook on the construction sector in the region?

ARQ: Projects in the region are definitely picking up momentum and there is a lot of progress taking place. Especially in Saudi Arabia, there are several large projects underway. The UAE is also at the forefront of development and construction projects.

We have been approved by various projects such as NEOM, the Red Sea project and others.

“We are now venturing into the segment of solar cables.”

Eng Ammar R Qari, general manager – sales and marketing, MESC.



Photo Credit : MESC

Eng Ammar R Qari, general manager – sales and marketing, MESC.

TRME: How was your experience at Middle East Energy this year?

ARQ: We have been attending the Middle East Energy show for many years. This year has been one of the best in terms of quality of participation and interactions.

TRME: How is MESC facilitating sustainability?

ARQ: MESC is always on the lookout for niche markets and better opportunities that promote the goals of sustainability. We are now venturing into the segment of solar cables. We have necessary approvals in place and are further looking at aligning ourselves with the certification requirements of different regions. ■



Photo Credit : MESC

MESC provides high quality cable solutions to a range of industries.



Aksa Power Generation shared its global activities with visitors at the Middle East Energy 2022.

Photo Credit : Aksa Power Generation

Power your future - Aksa Power Generation

Aksa Power Generation participated in the Middle East Energy 2022 exhibition, connecting to the energy community and exploring global solutions.

A KSA POWER GENERATION shared its global activities with visitors from more than 30 countries through interviews held during the exhibition. On the second day of the show, Aksa had the opportunity to meet several global partners for the

first time since the pandemic.

Aksa Dubai, as regional headquarters, manages six branch offices in the Middle East and Africa region. The Dubai office established on an area of 12,000 sq m has been operating since 2003 with more than 80 employees who are experts in their fields, ensuring optimised lighting solutions for the region.

Aksa Power Generation manufactures gasoline, diesel, natural gas and marine generating sets with capacity ranging between 1 kVA to 3.125 kVA as well as lighting towers and generator hardware, across three facilities in Türkiye, China, the USA and two trade centres in the Netherlands and the UAE.

The company continues to increase its investments in technology to remain the pioneer of change in manufacturing soundproof, environment- friendly generators with lower fuel consumption.

Aksa has carried out many successful projects in Türkiye and around the world through solutions for construction, mining, data centres, healthcare and other industries. Within the field of data centre power systems, Aksa Power Generation, is the first and only Turkish brand in the world to be approved by the Uptime Institute for compliance with TIER III and TIER IV standards for 55 different models. ■

Photo Credit : Aksa Power Generation



On the second day of the Middle East Energy show, Aksa had the opportunity to meet global partners.

Moteurs Baudouin announces new partnership with Power Solutions International

THE AGREEMENT WILL see Baudouin expanding its product range, offering the PSI rich burn gas engine range to the European, Middle Eastern and African markets. The partnership is a perfect complement to Baudouin's PowerKit diesel and lean burn gas product lines, as it means the company can deliver across the full spectrum of power solutions and provide even more choice for Baudouin's clients around the globe.

Founded in France more than a century ago, Baudouin is a proven market leader in quality diesel and gas engines for marine and power generation applications. With headquarters in Cassis, France, and additional manufacturing based in Weifang, China, Pune, India and Tutayev, Russia, product sales and servicing are available in more than 130 countries, across six continents.

PSI, based near Chicago, Illinois, USA, is a leader in the design, engineering, and manufacture of a broad range of advanced, emission-certified engines and power systems. The company's unique in-house design, prototyping, engineering and testing capacities allow PSI to customise clean, high performance engines to run on a wide variety of fuels, including natural gas, propane, gasoline, diesel and biofuels.

Both brands are united as part of the Weichai Group, a diverse international conglomerate which owns powertrain, vehicle, marine, construction machinery, intelligent logistics, fuel cells, agricultural machinery, control systems, and other business segments. Weichai has operations in 55 countries with 500 authorised service centres worldwide, which brings an expanded global business footprint to the Baudouin and PSI partnership.

The first public outing for the newly announced partner companies, was the Middle East Energy show held from 7-9 March 2022 in Dubai, UAE. At the show, Baudouin showcased the groundbreaking 8.8L 200 kWe PSI engine.

For gas standby power generation applications, it is the highest output ever recorded from such displacement. In order to achieve this rating, several advanced engineering improvements in material



Photo Credit : Moteurs Baudouin

The first public outing for the newly announced partner companies, was the Middle East Energy show.

design, engine design, and engine cooling have been implemented.

PSI has also gained a US patent for the engine (US11,143,093 B2) with a second one pending.

A stepping stone to a fully renewable energy infrastructure, gas power provides an opportunity for a smooth transition towards zero emissions, until large scale fully renewable energies are available. And, more new products are already in development, maximising the shared expertise of both companies. These include new gas products from LPG and LNG to biogas under the Baudouin and PSI brands.

The new collective product portfolio of both Baudouin and PSI promises clients around the EMEA region the most competitive and complete range of power solutions available across all applications.

The comprehensive product offering and market strengths across both companies, makes the new agreement between Baudouin and PSI a winning partnership, and an exciting new development for the industry in 2022.

GEUF: Energy storage vital to ensure stable future electricity grids

WITH INCREASING CAPACITIES of renewables to be integrated into national grids, system planning and development of energy storage and peaking power will be vital to ensuring power supplies remain reliable and stable, according to Informa Market's Global Energy & Utilities Forum (GEUF).

Mohammed Al-Taani, secretary general of the Arab Renewable Energy Commission (AREC), highlighted the importance of renewable energy investment, with expected figures for this investment standing at around US\$1tn by 2040. "All Arab countries have emphasised to go green," he said during a panel on Energy Systems of the Future"

He called on the need to generate more energy management and energy efficiency in the Arab world, similar to the European model, and reaching 30% of renewable energy by 2030.

Kuwait is one of the regional countries that is gradually investing in renewable energy, said Iqbal Altayar, director of technical supervision (Power and Alternate Energy) at the country's Ministry of Electricity and Water, encouraged all companies to invest in Kuwait.

As countries continue to learn from one another, the collective

goal is to reach the affordable and sustainable delivery of energy and water, both of which are becoming more and more interdependent, particularly in the Middle East. "One of the trends is how energy utilities used to organise themselves by forecasting a level of demand and making sure the supply is there and now, it will go the other way around, by forecasting the supply," said Mike Ballard, vice president of industry strategy at Oracle Utilities.

"This means our focus now is the demand side that will go through one of the biggest transformations. There will be flexibility of demand, which could go into a human behaviour problem and trying to bring customers in the process and engage them to partake in programmes related to peak load and energy efficiency, when they have a myriad of other shoes to fill," added Ballard.

Jens Madrian, executive director of NEOM Energy at NEOM, mentioned a responsibility to look at every alternative way which would drive cost down. "That could well be that we enter into longer term PVAs and just create a market for flexibility. The flexibility in the past is predominantly managed on the supply side, but we need to flex it out somewhere, we still need to balance the system and that shifts the onus to demand," Madrian concluded.

Smart solutions for sustainable growth

Fayez Al Nobani, channel sales director and mechatronics engineer (Middle East and Africa), Fluke, discusses innovations enabling sustainable energy use.

Technical Review Middle East (TRME): How important are smart solutions and new innovations such as those around detection and measurement of wasted energy for reducing our carbon footprint and achieving sustainable power?

Fayez Al Nobani (FAN): Smart solutions that enable the fast and accurate detection and measurement of our critical wasted resources will play a vital role in deciding the successful execution of company and country-wide strategic initiatives related to waste reduction and sustainable energy use. Innovative products, such as the compact and professional test and measurement solutions from Fluke, provide several advantages by making it easier and more efficient for teams to carry out preventive maintenance programmes that will help achieve broader goals relating to sustainable power management and the reduction of carbon footprint.

TRME: What other benefits such as safety and financial, can also be gained from them?

FAN: Fluke's innovative solutions comply with the highest safety standards, which provides significant benefits to our customers. As an example, maintenance teams must be able to detect compressed air and gas leaks quickly and accurately in critical systems, which can be difficult to access even under normal circumstances. There are many critical processes that involve other extremes, such as high temperatures or hazardous zones. Fluke's ii910 Precision Acoustic Imager offers greater sensitivity and long-range leak detection of up to 100 metres, enabling maintenance personnel to identify and report on defects from within or outside of a plant's perimeter.

As well as the safety aspects, the rapid detection of leaks is important to ensure that plants maintain critical operation. Fluke's range of specialist acoustic imaging tools have



Fayez Al Nobani, channel sales director and mechatronics engineer (Middle East and Africa), Fluke.

proven to deliver energy savings between 30-40%. Fluke's free-to-use online ROI calculator helps our customers easily determine the payback on any capital investment made in our products, and our integrated software can be used to easily categorise and quantify the cost of leaks to ensure the most important repairs are made first.

TRME: What solutions does Fluke offer in this environment? And what industries can benefit from them?

FAN: Fluke's energy loss detection technology is capable of identifying and isolating energy loss and wastage, which can

then be recovered and preserved for future uses. We serve a wide range of sectors in the region, from energy through to chemical processing, oil and gas, pharmaceuticals, food and beverage, and manufacturing.

Our company's power quality and calibration tools also work on preventing the disruptions and outages in power grids. These products and solutions are essential to industries that apply electronic installations, maintenance and services, precision measurement and quality control. Fluke's new-to-market 1770 Series of Three-Phase Power Quality Analysers is an ideal solution for the utilities sector. We also recently introduced the world's first clamp meters for solar power installations with a CAT III 1500V safety rating to help our customers solve critical problems in this sector.

TRME: What is the market for these products in the Middle East and Africa? Are you seeing more companies turn to your solutions as environmental concern continues to grow?

FAN: Some of the world's largest solar and renewable projects in the world are in the MEA region. As a leading global manufacturer of compact, professional electronic test and measurement tools and software, Fluke offers innovative and reliable solutions for maintenance teams, making their jobs safer and more efficient.

TRME: What sustainable undertakings are Fluke pursuing internally to help environmental efforts?

FAN: Fluke is committed to a sustainable future. We publish annual reports to communicate the ways in which our focus on sustainability is building a future that is stronger, safer, and smarter — for customers, employees, suppliers, communities, and the planet.

Our own 2020 emissions profile reflects a significant reduction of 9.1% in emissions. ■

Trina Solar sets i-TOPCon cell efficiency at 25.5%

TRINA SOLAR, GLOBAL PV and smart energy total solutions provider, has announced that its 210x210mm i-TOPCon cell has achieved maximum efficiency of 25.5%, setting a world record for the twenty third time.

The result was certified by the National Institute of Metrology of China, the preeminent metrology scientific research centre and national legal metrology technical institution.

At the company's State Key Laboratory of PV Science and Technology, Trina Solar researchers solved technical problems related to selective boron emitter, large-area tunneling silicon oxide and doped polysilicon preparation, and high-efficiency hydrogen passivation. By using mass production cell equipment, they brought the maximum efficiency of large 210mm N-type monocrystalline cells to 25.5%.

"We are extremely proud of these latest achievements," said Dr Chen Yifeng, head of the company's high efficiency cell and module R&D centre, "Trina Solar is thoroughly committed to cutting-edge research and development and has been a pioneer in technological production and manufacturing, helping it to maintain its leading position with its efficient products."



Photo Credit: Trina Solar

The company has made significant contribution to advances in the photovoltaic technology.

The achievements have been vital as the company has pressed on with its 210mm N-type i-TOPCon high efficiency cell project and paves the way for follow-up development in the high-end market.

In February, Trina Solar was named by Reuters Events as one of the top 100 innovators in Global Energy Transition 2022. The company was the only listed company

in China in the list and among only a few others in the Asia and Pacific region to figure on it.

Over the years Trina Solar has applied for 2,200 patents, making it an industry leader in this respect. It has played a key role in 107 industry standards and published 96 standards, making a tremendous contribution to advances in the photovoltaic technology.

Renewables take lion's share of power additions in 2021: IRENA

NEW DATA RELEASED by the International Renewable Energy Agency (IRENA) shows that renewable energy continued to grow and gain momentum despite global uncertainties. By the end of 2021, global renewable generation capacity amounted to 3,064 Gigawatt (GW), increasing the stock of renewable power by 9.1%.

Although hydropower accounted for the largest share of the global total renewable generation capacity with 1,230 GW, IRENA's Renewable Capacity Statistics 2022 shows that solar and wind continued to dominate new generating capacity. Together, both technologies contributed 88% to the share of all new renewable capacity in 2021. Solar capacity led with 19% increase, followed by wind energy, which increased its generating capacity by 13%.

"This continued progress is another testament of renewable energy's resilience. Its strong performance last year represents more opportunities for countries to reap renewables' multiple socio-economic benefits. However, despite the encouraging global trend, our new World Energy Transitions Outlook shows that the energy transition is far from being fast or widespread enough to avert the dire consequences of climate change," says IRENA director-general, Francesco La Camera.

"Our current energy crisis also adds to the evidence that the world can no longer rely on fossil fuels to meet its energy demand. Money directed to fossil fuel power plants yields unrewarding results, both for the survival of a nation and the

planet. Renewable power should become the norm across the globe. We must mobilise the political will to accelerate the 1.5°C pathway."

To achieve climate goals, renewables must grow at a faster pace than energy demand. However, many countries have not reached this point yet, despite significantly increasing the use of renewables for electricity generation.

Sixty per cent of the new capacity in 2021 was added in Asia, resulting in a total of 1.46 Terawatt (TW) of renewable capacity by 2021. China was the biggest contributor, adding 121 GW to the continent's new capacity. Europe and North America—led by the USA—took second and third places respectively, with the former adding 39 GW, and the latter 38 GW. Renewable energy capacity grew by 3.9% in Africa and 3.3% in Central America and the Caribbean. Despite representing steady growth, the pace in both regions is much slower than the global average, indicating the need for stronger international cooperation to optimise electricity markets and drive massive investments in those regions.

About IRENA

IRENA is the lead intergovernmental agency for global energy transformation and serves as the principal platform for international cooperation, a centre of excellence, and a repository of policy, technology, resource and financial knowledge on renewable energy.

Rooftop solar installations to almost double by 2025

ROOFTOP SOLAR PV installations are set to surge in the next three years, with total capacity reaching 94.7GW by 2025, reveals Rystad Energy analysis.

The growth will continue a recent upward trend for the rooftop solar market, following relatively slow adoption from 2010 to 2016.

Rooftop installations have jumped by 64% in five years, rising from 36 GW in 2017 to 59 GW in 2021 and now represent 30% of the total global solar capacity. The growth has been primarily driven by an increased adoption in China, where rooftop installations increased from 19.4GW in 2017 to 27.3GW in 2021. Before 2017, rooftop solar was almost non-existent in China, with only 4GW of installed capacity in 2016.

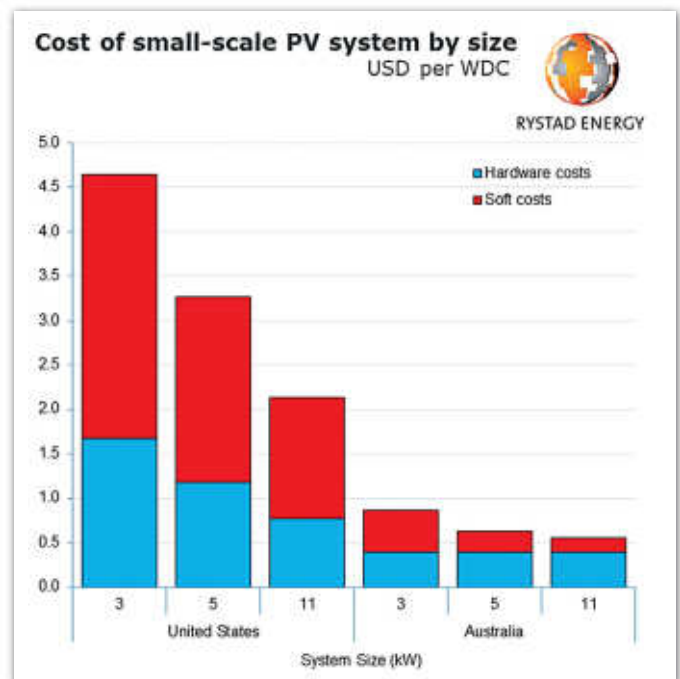
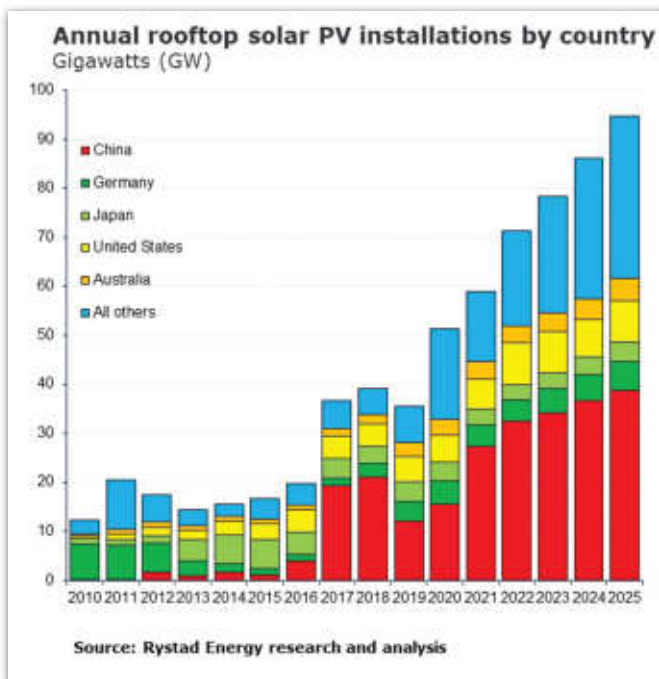
The surge in rooftop capacity is mainly due to the incentives and friendly policies introduced by many countries to promote adoption, especially feed-in tariffs (FiTs) that guarantee an above-market price for producers.

“Small scale solar PV, including residential, commercial and industrial (C&I), and off-grid projects, are gaining momentum

supported by economics and policies, with China, Japan, Germany, the US and Australia emerging as key markets. Key drivers for the high uptake in the residential sector include high retail electricity costs, low system costs, high FiTs and the available roof space,” commented Gero Farruggio, head of renewables research at Rystad Energy.

Australia, the US and the UK are the only countries in the top 10 countries list for total installed rooftop capacity where most of the systems are dedicated to powering residential properties. This is due to a combination of factors, including incentives (FiTs and grants), the high proportion of homeowners, and the many rooftops with suitable space, as well as the good solar resource (although this does not apply to the UK).

By contrast, the other top countries either do not have enough solar resources, lack incentives to improve the competitiveness of rooftop PV or have most of their population living in rented properties or apartments and are unable to install solar. Thus, C&I leads rooftop PV installations.



Worley appointed for 25GW Oman green hydrogen project

TECHNICAL AND ENGINEERING consultancy firm Worley has been appointed to provide a study for Green Energy Oman, a consortium of state energy firm OQ, Hong Kong-based Intercontinental Energy and Kuwait's Enertech, to develop a 25GW green hydrogen scheme.

The study will identify opportunities to enhance value from the expected ten year development period of the project. It will include employment and development of Omani nationals and manufacturing opportunities for local firms across the supply chain.



The Green Energy Oman consortium began undertaking a solar and wind monitoring study for the project in 2019.

“Hydrogen has the potential to decarbonise hard-to-abate sectors,” said Hans Dieter Hermes, vice-president of clean

hydrogen at Worley. “This project means Oman can use its renewable energy potential to produce green hydrogen and green ammonia for itself and for export.”

The Green Energy Oman consortium began undertaking a solar and wind monitoring study for the project in 2019, and has identified an area in the central Al-Wusta governorate that has significant solar radiation during the day and strong wind at night to enable the development of both solar and wind capacity for the green hydrogen scheme.

New word in Radar instruments — VEGAPULS 6X

One solution that can measure in every conceivable level application.

RADAR TECHNOLOGY BOASTS ever growing foothold in the instrumentation and automation fields. First Radar instruments in the early 1990s were niche and specific, targeting applications where existing technologies were lacking. Today, Radar instruments are rapidly taking the place of the formerly omnipresent ultrasonic devices in the water supply and wastewater industry worldwide.

The spread of Radar instruments naturally comes with a large variety of devices available in the market. A multitude of applications call for appropriate device parameters, features, optimised for certain conditions and meeting various regulations requirements. Companies look for various solutions to optimise their instrumentation stock, focusing on one or two suppliers; permitting limited amount of device models or allowing managers to select stock locally. Different solutions to suit different situations.

Today, German manufacturer VEGA, brings to the market, a new solution to simplify the use of state-of-the-art Radar sensor technology.

One sensor for all applications

February 2022 saw the introduction of the VEGAPULS 6X, the latest VEGA Radar sensor that replaces its past 'Pro' line in its entirety. A single sensor that can measure in every conceivable level application. The choice of sensor is no more about knowing the model in the product range. It is now about the needs of the user, and the requirements in the intended application.

"Ultimately, it's not the sensor that counts, but what the users can achieve with it in their individual processes," said Florian Burgert, who, as a product manager at the VEGA headquarters in Schiltach, Germany, has been closely involved in product development from the very beginning. "Just knowing that they have chosen the best possible measurement solution and that they will reach their goal faster with it, makes a big difference in their everyday operations."

But is it even feasible?

The radar chip inside the VEGAPULS 6X combines the experience gained from 30 years of radar level measurement engineering. Arguably, this is the single most important innovation for the sensor. VEGA had separate sensors dedicated to measurement of liquids and solids, from water to very poorly-reflecting oils, from gravel to fine powders. The challenge is for electronics to recognise the different reflections. A combination of narrow bandwidth and advanced electronics logic enables the VEGAPULS 6X to perform perfectly on any process material.

The new sensor encompasses past technologies that had been optimised for specific applications. Effectively, the new VEGAPULS 6X combines the best of the previous 80 ghz, 26 ghz and 6 ghz sensors, such as the VEGAPULS 64 and 69, in one device. Full range



Photo Credit : VEGA

The VEGAPULS 6X® is a universal level sensor that can measure both liquids and solids.

of process conditions, from low to high temperatures, to high pressure, and extra safety requirements are all covered in the devices. The user does not need to remember the appropriate model any more – just indicate the working conditions, and generate the appropriate configuration.

The Radar that complies with cyber security standards

New challenges of the 21st century include increased risks in the digital security field. Security standard IEC 62443-4-2, covering strict requirements for communication security and access control, are observed for the sensor.

Imagine ordering a device that is interchangeable between a diesel tank, a cement silo, and a water pump room. With a single set of spare parts and best-in-class performance. It is the VEGAPULS 6X. ■

WEG launches CFW900 range of variable speed drives

GLOBAL MANUFACTURERS OF electric motor and variable speed drive (VSD) technologies, WEG has launched a new high-performance VSD. With a simplified design, increased power density and ease-of-use that allows the user to access configurations and technical data in a fast and simple way, the CFW900 provides a multitude of benefits. The VSD comes with an advanced energy saving function, high operating ranges, safety functions and increased productivity when implemented in a range of industrial applications.

The CFW900 is more compact for ease of installation inside electrical panels and is focused on being more efficient for all applications. It has a built-in feature — making it easier to implement WEG’s Motion Fleet Management (MFM) system, which allows for online monitoring and maintenance management of the industrial drive fleet.

This new model also features an ethernet port, giving the drive the ability to publish relevant drive data on the MFM system and provide a means to optimise its operation and maintenance features. The CFW900 works with a range of systems to assist the user with managing their VSD — with a smart management system, it is now possible to adjust the behaviour of the inverter according to load, supply voltage and ambient temperature variations,



The new range allows the user to access configurations and technical data in a fast and simple way.

Photo Credit : WEG

ensuring optimised performance under different conditions.

In addition, the CFW900 is compatible with the new EcoDrive app which allows users to monitor, set parameters, programme and simulate the efficiency of their system. This VSD also has the capacity to communicate data directly with the cloud and has increased data and information protection.

“Following the introduction of the new regulations set out by European lawmakers last year, WEG is continuing to design VSDs that look one step beyond regulatory laws and keep greater energy efficiency in mind,” explained Marek Lukaszczyk, European and

Middle East marketing manager at WEG.

“With the addition of the CFW900 to the CFW family, we wanted to offer a VSD with optimum connectivity so that users can experience increased productivity, ease-of-use and practicality in any application.”

Like previous models, the CFW900 includes the integrated safety provisions of Safe Torque Off (STO) and Safe Stop 1 (SS1) — when activated, these features stop any unintended starting of machinery and prevent uncontrolled stops, giving additional safety to the operator.

WEG manufactures electrical and mechanical equipment for industrial sectors.

Soltec: Carving a new niche in the Middle East

SOLTEC, SPECIALISING IN vertically integrated solutions for the photovoltaic solar energy industry is a Spanish company operating in 16 countries worldwide. Since Soltec started the construction of a 16.5MW solar plant in Al Zumeilah in 2017, 50km south of Jordan’s capital Amman, the company has continued to focus on the Middle East. Soltec’s SFOne tracker, launched in 2021, features the Dy-Wind technology, the most advanced methodology for design of wind structures, as well as the Diffuse Booster system for optimisation under poor lighting conditions. This 1P-array tracker with two rows connected to a single tube, is adaptable to multiple climate and terrain characteristics.

As explained by members of the Fraunhofer Institute, “Solar technology, especially in the Middle East and Northern Africa, is quite promising.”



Photo Credit : Adobe Stock

Solar technology is quite promising in the Middle East and Northern Africa.

Soltec’s commitment to this technology, as well as to solar energy and the region, remains strong.

Soltec counts on a global labour force of

more than 1300 people and 18 years of history manufacturing PV tracker equipment which is supplied along with related services.

Dubai Municipality announces 62% completion of world's largest waste treatment facility

THE DUBAI WASTE Management Centre (DWMC) in Warsan, the world's largest and most efficient energy project of its kind, is now 62% complete and will contribute to the Dubai Clean Energy Strategy 2050, launched by HH Sheikh Mohammed Bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai.

By 2024, the facility will treat approximately 5,666 tonnes of solid waste across five burning lines daily, with 12,480 air filters to treat all emissions. The waste will be converted into energy, which will then be utilised to feed the local electricity grid with about 200 MW/h of clean energy.

Eng Dawood Al Hajri, director general of Dubai Municipality, said that the strategic Dubai Waste Management Centre has sustainable development, economic, and environmental dimensions. It is the first globally in terms of size and work efficiency. Occupying a total area of more than 400,000 sqm, the plant will have an operational capacity to process 1.9 million tonnes of waste annually and will be capable of converting them into energy resources to meet the needs of Warsan Sewage Treatment Plant and the DWMC, which is equivalent to the consumption of over 135,000 households.

He added, "At Dubai Municipality, we continue to implement strategic projects that focus on community welfare, environmental protection, and sustainability of vital resources. We are pleased to announce the progress in the construction of the Dubai Waste Management Centre, which is essential to Dubai's vision of becoming the world's most sustainable city. The plant will provide an alternative and sustainable solution to waste storage and serve as a clean energy resource."

Al Hajri said, "We are keen to employ state-of-the-art technical innovations and apply the best environment-friendly practices to improve the quality of life of our people, promote community health and safety, reduce emissions, and address global warming."

The Municipality said that the installation of the facility's generators, which will provide electricity produced from waste treatment, and the turbine engines are completed. Once



The waste will be converted into energy, which will then be utilised to feed the local electricity grid.

operational, the centre will treat 45% of the current municipal waste volume in Dubai. The plant is designed to accommodate 1,000 trucks per day, approximately 88 trucks per hour. The recycled bottom ash from generated by the process will be used in infrastructure projects. The project will also use recycled water from the Warsan sewage treatment plant (STP), which will promote circular economy and sustainability.

The Dubai Municipality has implemented its action plans under the Dubai Integrated Waste Management Strategy, which aims to reduce and divert waste from landfills by 2030 and address the power needs of Dubai's growing population and economy.

Ring announces customisable security system for customers in the UAE

RING, WHOSE MISSION is to make neighbourhoods safer, announced its affordable, easy-to-install security system, Ring Alarm, in the UAE. A sleek, customisable and easy to install home security system, Ring Alarm offers commitment-free home security where its needed most.

Ring Alarm works as a stand-alone product for anyone looking to add an easy-to-install Alarm system to their home. For that extra layer of security, integrate Ring Alarm with Ring Video Doorbells and Security Cameras in the Ring app, so that when the Alarm sounds, it will automatically trigger all Ring cameras to begin recording (when subscribed to a Ring Protect plan), even if they do not detect motion. Ring Alarm also works with select Alexa-enabled devices, so users can arm, disarm and check the status of their Alarm with simple voice commands.

Customers can utilise one-touch buttons on the Ring Alarm Keypad to sound the Alarm or to activate Assisted Monitoring (with Ring Protect Plus) and notify three preset

contacts that there is a medical emergency or fire. Plus, the Keypad's Modes buttons make it easy for customers to set their Alarm to one of three modes—Disarmed, Home, or Away Mode, as needed. Ring Alarm has compact easy-to-mount sensors to fit into smaller spaces, for added convenience and flexibility where its needed most.

Jamie Siminoff, chief inventor and founder of Ring, said, "As we continue on our mission of making neighbourhoods around the world safer, it's important to bring that peace of mind inside the home with effective, affordable home security. We're excited to bring our alarm security system to our customers in the UAE, making easy-to-use, customisable home security available to everyone, without long-term, expensive commitments. By combining Ring Alarm with Ring Video Doorbells and Security Cameras in and around the home, customers can customise a comprehensive whole-home security system that best suits their setup."

MYCRANE expands global network with new franchisees for UK, Ireland and Qatar

MYCRANE, THE DUBAI-BASED digital disruptor for the cranes and construction sector, has announced its expansion into Europe, following the signing of three more franchise agreements.

The digital crane rental platform, appointed franchise holders for the United Kingdom, the Republic of Ireland and Qatar at the recent Cranes and Transport Middle East conference held in Dubai.

The new franchisees will be responsible for providing the full range of MYCRANE services – which include the world's first online crane rental platform, a Marketplace and support for engineering and site surveys – in their respective markets. They are already in the process of registering local crane rental companies on the platform, and will shortly be marketing the service to customers.

Commenting on the appointments, MYCRANE founder and CEO Andrei Geikalo said, "Entering the European market is an



Photo Credit: MYCRANE

MYCRANE will be owned and operated by Ant Dynamics, in Qatar.

exciting moment for MYCRANE, which will soon be operational in three more important countries.

"With its burgeoning renewables sector, the UK will see a huge requirement for cranes of all sizes up to the 750t class – not only for installation, but also for component movements, offloads and storage. Besides renewables, there is a growing nuclear sector and infrastructure projects such as

HS2 and the Liverpool dock expansion.

"Similarly, we are delighted to welcome our new partner for Qatar, which remains one of the fastest growing global construction markets, owing to the vast number of infrastructure, housing, rail and many other projects currently underway."

In Qatar, MYCRANE will be owned and operated by Ant Dynamics, a Doha-based provider of heavy lift and transportation engineering services. Managing director Kamal Kassab has more than 18 years' experience in the heavy lift sector, working on major projects for the construction of oil and gas plants, civil works and football stadiums.

Kassab said, "As a company committed to raising the standards of lifting operations in the Middle East, Ant Dynamics is pleased to operate MYCRANE in Qatar. We are confident that users of the MYCRANE online platform will appreciate the benefits of selecting the right crane for the right job at a fair rate."

HMS unveils communication solutions for battery energy storage systems

HMS NETWORKS, AN industrial information and communication technology solutions provider is has introduced communication solutions for the rapidly expanding battery market.

According to HMS, Battery Energy Storage Systems (BESS) are made up of battery cells that are combined into battery packs which can then be combined into containers which in turn can make up battery parks the size of several football fields. The systems can use new or recycled batteries and combine many different components. However, these large battery parks need a lot of communication capabilities in order to work. HMS' comprehensive package of communication solutions is catered for this application area.

Since the battery market has been spearheaded by the car industry, CAN is the communication standard of choice in many systems. Here, HMS offers an extensive portfolio of communication solutions via the Ixxat brand – for PC connection, networking, line extension, galvanic isolation and more.

In networking, the protection of components is crucial, both from external sources such as lightning strikes and from system-related issues. Therefore, device protection is a must to avoid damage.

Networking gateways BESS often combine a variety of different equipment from different industries within a single application – batteries, BMS, PLCs, fire detection units or air conditioning. To combine different equipment, it is necessary to interconnect various protocols and network standards. CAN, Modbus, BACnet, KNX and other protocols can be easily linked via intelligent gateways from HMS, which handle the all-important data exchange while also enabling centralised control.

In addition, these gateways can selectively filter, map and, if necessary, manipulate the data in order to realise the best possible data exchange.



Photo Credit: HMS Networks

Networking gateways from HMS are well suited for BESS.

Cloud/SCADA connectivity and remote access Intelligent networking are also required in order to connect to cloud solutions or SCADA systems. This connection can be made by using SG (Smart Grid) gateways from HMS that support both energy and industrial fieldbus protocols, as well as protocols required for cloud connection.

The SG gateways enable centralised control as well as remote access for predictive maintenance, logging or data visualisation using the i4SCADA® solution from the HMS-owned company WEBfactory. The SG gateways also provide robust cybersecurity features, such as firewall, OpenVPN, TLS encryption and user management. These protective measures are indispensable to protect against cyber-attacks.

"We see a rapidly growing demand for communication solutions in Battery Energy Storage Systems as society as a whole is turning to more sustainable energy sources such as wind and solar," says Alexander Hess, general manager, HMS business unit Ixxat.

Connecting the global construction community

The Big 5 Construct Egypt will connect suppliers with quality buyers, sharing cutting edge knowledge.

THE BIG 5 Construct Egypt, an important gathering for the global construction and infrastructure community in Egypt, is returning to the Egypt International Exhibition Centre (EIEC) from 25-27 June 2022.

For three consecutive days at the EIEC, the event connects suppliers with quality buyers, promoting innovation, sharing knowledge and accelerating business.

The aim is to unite the global construction community and provide leading-edge innovation, knowledge, and business opportunities for industry stakeholders to connect, grow, and succeed. The organisers stated that they believe in accelerating progress in the construction industry to support economic growth and promote a healthier and more sustainable built environment around the world.

Exhibitors can gain insights into local regulations, build new business partnerships, introduce their products and promote their brand to a new audience, meet new buyers, decision makers, government officials and distributors, meet new customers face-to-face and increase their sales pipeline.

Launched in 2018, the event runs under the patronage of HE Dr Moustafa Madbouly, Prime Minister of the Arab Republic of Egypt, and is the only construction show endorsed by the Egyptian Ministry of Housing, Utilities and Urban Communities.

Mohamed El Dahshoury, CEO of Hassan Allam Construction (HAC) said, "The Big 5 Construct Egypt represents a great place for business leaders to discuss, sign agreements and present investment opportunities, at a time when infrastructure projects play a decisive role in the economic recovery, not only in Egypt but around the world."

With the introduction of new value-added features such as The Big 5 Egypt Impact Awards, The Big 5 Egypt Leadership Conference and CPD certified talks; the event boosts the industry's recovery efforts



Photo Credit : The Big 5 Construct Egypt

in a safe and convenient environment.

Developed for the industry by listening to key stakeholders through the esteemed Advisory Committee, The Big 5 Construct Egypt brings The Big 5 brand's experience of more than 40 years and its success to Egypt's government-led multibillion dollar construction and infrastructure projects market.

Exhibitors can gain insights into local regulations, build new business partnerships and introduce their products to a new audience.

Established in 1979 in Dubai, The Big 5 has enabled partnerships, advanced knowledge, and industry best practices, while serving as the gateway for international companies to access emerging markets. Year after year, the event has facilitated trade and brought thousands of innovative products to the Middle East region and beyond, helping construction professionals thrive through face-to-face connections.

Continuing to evolve and expand into new territories from its UAE origins to Saudi Arabia, Egypt, Kenya, Ethiopia, Nigeria, and South Africa, the portfolio has also developed specialised events for the landscape, concrete, PMV, stone, HVAC R, solar, glass, windows, doors and facades, and facilities management sectors.

The Big 5 portfolio of events attracts more than 100,000 participants, supporting real estate developers, architects, contractors, engineers, consultants, manufacturers, and distributors to excel in their projects and be ready for this new and different era. ■



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The new models, including the S550 combine excellent manoeuvrability in tight areas and the reach for applications such as dumping materials.

Photo Credit : Bobcat

Bobcat launches new loader range

Doosan's Bobcat looks to strengthen its position in the market with the unveiling of 500 and 600 series models.

BOB CAT, THE DOOSAN-OWNED farm and construction equipment manufacturer is looking to further strengthen the company's position in the Middle East and Africa. The company will unveil eight new 500 and 600 Series compact loader models to the market with a complete portfolio of 15 models. The new machines include the S510/S530/S570/S590 and S630/S650 skid-steer loaders and the T590 compact track loader.

The new loaders aim to provide operators with increased performance, enhanced comfort and optimised maintenance requirements to maximise job site efficiency.

Radius and vertical lift path

The new S510, S550 and S630 radius lift path loaders combine feature superior manoeuvrability in tight areas with the reach and visibility needed for applications such as dumping materials over walls, backfilling or loading flatbed trucks.

The S530, S570, S590, T590 and S650 models feature vertical lift path boom arms particularly suited to lift and carry as well as material-handling applications.

Gaby Rhayem, regional director of MEA at Doosan Bobcat EMEA, said, "The new 500 and 600 Series introduces a fresh look for our market-leading loaders in MEA. In the

new S510 and S530 models, the compact size is maintained but customers also benefit from the higher torque and performance of a new Interim Tier 4 engine."

The new S510 and S530 models are powered by Kubota V2403 engine, improving performance while meeting interim Tier 4 emission regulations. In the new S550, S570, S590 and T590 models, power is provided by the Kubota V2607 interim Tier 4 engine. In the new S630 and S650 skid-steer loaders, power continues to be provided by the dependable Kubota V3307 interim Tier 4 engine.

More power while staying compact

The S510 and S530 continue to offer the same compact dimensions and low weight, so they can work/manoeuvre easily in tight

"The new 500 and 600 Series introduce a fresh look for our market-leading loaders in MEA."

spaces and can be easily transported. The new engine delivers increased engine torque with lower idle at the same horsepower, so the new S510 and S530 can now be dedicated to jobs that demand more power. Coupled with the availability of the new high-flow hydraulics option for the first time in these models, this further expands their exceptional versatility, allowing them to be used with higher flow attachments such as sweepers, planers and wheel saws.

Higher operator comfort

In all the new models, the 'Cloth Suspension Seat' option is made available, improving the operator's comfort in hot weather and providing a snug fit on slopes and inclines. Bobcat continues to offer other popular comfort features in all eight new models, including cushioned lift and tilt cylinders – increasing productivity and again enhancing comfort.

Versatile duty tyres

The new loaders can be equipped with the option of 'Versatile Duty Tyres', with a bi-directional design for use on most common mixed surfaces, improving lifetime significantly. Industrial 'Solid Flex Tyres' are also available as an option and are designed for intensive wear applications that have a higher risk of punctures. ■

ALEC launches data centre construction company



BUILDING ON ITS strengths in construction, MEP, logistics, fitout, and technology integration, and looking to cater to growing demand for regional data centres, ALEC announced the establishment of its newest subsidiary, ALEC Data Centre Solutions.

In addition to designing, implementing, and commissioning turn-key data centres that conform to the highest international standards, the company will offer clients prefabricated data centres for quick deployments within the region. It is also set to be the first in the region to specialise in liquid immersion solutions that will result in more sustainable, customisable, and cost-effective data centres. ALEC Data Centre Solutions will also inaugurate its flagship experience centre where clients and prospects will have the opportunity to see the company's solutions first-hand and engage with experts about their specific requirements.

Buoyed by the wave of digital transformation, as well as concerns around data sovereignty and security, the UAE has seen a sharp increase in the demand for local data centres. However, apart from a few large organisations, conceptualising, building, and commissioning data centres has been a challenge for most enterprises in the region.

"With our entry into the rapidly advancing data centre space, ALEC is set to fill the void for a single, large-scale specialist organisation that can offer the entire gamut of data centre development services," said Kez Taylor, CEO, ALEC.

ALEC Data Centre Solutions will focus across three primary lines of business — traditional data centre construction solutions, prefabricated solutions, as well as modernisation and retrofit solutions. The company will have the ability to offer Liquid immersion solutions, as well, within all these sectors.

The company will utilise the Group's in-house civil, MEP and technology expertise to become the preferred contractor to support enterprises and hyperscalers in the successful delivery of large-scale, customised data centres for cloud service delivery, mission-critical workloads, and disaster recovery purposes.

Through its partnership with Submer, a leading innovator in advanced immersion cooling solutions for Cloud and Edge computing, ALEC Data Centre Solutions is primed to set new benchmarks in data centre energy efficiency with solutions that help save 50% on CAPEX building costs, up to 95% on cooling expenses, and more than 90% water usage for cooling purposes.

"Building on the strengths of the broader ALEC Group allows us to draw from a vast pool of resources and expertise to deliver the next-generation data centres that will power the digital transformation of enterprises in the region," said ALEC Data Centre Solutions spokesperson, Bjorn Viedge.

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Photo Credit : RMD Kwikform

Bridging the gap in the construction industry

RMD Kwikform has announced the launch of its next generation, heavy-duty R800 modular panel girder system.

“The new R800 system heralds the arrival of the next generation of equipment. We believe this system addresses a real gap in the market.”

Ian Fryer, divisional product innovation director.

RMD KWIKFORM, PROVIDER of formwork, falsework, and ground shoring solutions, provides engineering solutions in the field of temporary structures, needed to deliver major infrastructure and building projects.

R800 heavy-duty panel girder system

Allowing for the construction of clear spanning and bridging structures, RMD Kwikform’s new R800 panel girder system boasts versatility and increased safety.

The R800 enables the quick and safe installation of long lattice girders. Ideal for the most demanding requirements for supported, continuous, cantilever or launched falsework, as well as vehicle, pedestrian and service bridging, the system is a versatile solution that can also be adopted in the media and events industry and in tieless formwork.

Galvanised components produced in accordance with EN 1090 guarantees projects a safe, reliable system with reduced cost of ownership over the product’s lifecycle. Adopting the system offers higher strength steels and optimised forged girder connections, designed and engineered to match the strength of connecting parts.

These factors integrate the highest available strength-to-weight ratio into the system, along with enhanced fatigue performance. Alternative systems often see reduced strength at pin joints — the R800 rises to this challenge.

Ian Fryer, RMD Kwikform’s divisional product innovation director, said, “We are thrilled to be bringing the new R800 system to market, it truly heralds the arrival of the next generation of spanning girder equipment. I’m proud of the strength, versatility, and fatigue credentials that the

product development team have been able to incorporate into this system and the RMDK application engineers are looking forward to working with our customers to solve some hitherto very demanding structural and geometric challenges. We believe this system addresses a real gap in the market.”

The key result of the new girder solution is the efficiency of time and money, as well as sustainability benefits. The versatile nature of the R800 range minimises the amount of equipment required for bridge projects, in turn reducing labour, plant and transport costs. This translates to a lower overall carbon footprint while the industry moves towards a more environmentally-conscious approach.



The system minimises equipment requirement and reduces labour.

Photo Credit : RMD Kwikform

“The R800 is the only CE marked girder system on the market. While not all projects will need a CE marked solution, meeting this standard demonstrates a commitment to the highest levels of quality assurance, so contractors can be confident they’re selecting a system that goes above and beyond the minimum requirements.

“With R800, decision-makers can be assured of a modular panel girder solution that cuts costs, speeds up construction cycles, is easy to assemble and transport, and can meet all the demands placed on it.”

The R800 is compatible with RMD Kwikform’s 80kN Rapidshor falsework systems, with screw jacks mating directly with the R800 girder’s top chord. This loads the girders optimally, meaning fewer girders are required per project scheme, while enabling pre-camber, longitudinal falls, and super-elevation to be handled without the need for full-on falsework.

RMD Kwikform is bridging the gap between market requirements and availability. ■

“Decision makers can be assured of a modular panel girder solution that cuts costs, speeds up construction, and can meet all the demands placed on it.”

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CAT
LET'S DO THE WORK

Smart labelling, higher efficiency

Brady Corporation's printing and labelling solutions help identify and protect people, products and places. Christophe Nelissen, regional manager, Middle East and Southern Africa discusses the company's focus on automation.

Technical Review Middle East (TRME): What was your main focus at the Middle East Energy 2022?

Christophe Nelissen (CN): We have been participating in the Middle East Energy show for nearly two decades. What we wanted to do differently this year was to focus on smart labelling solutions and automation. So, this was one of the first editions of the exhibition where we showcased emerging technologies as well.

We have always been a company that focuses on innovations.

TRME: Would you please elaborate on your smart labelling solutions and the RFID technology?

CN: We see that customers are expecting more from a label, they want it to be connected and not be just a self-adhesive label.

The RFID technology opens a lot of possibilities such as capturing temperature, pressure, humidity and other parameters.

The flexible, temperature-sensing smart labels can be applied to almost any surface. Brady Corporation has unveiled a new, highly reliable dual frequency RFID label, making it possible for companies to

improve product and item supply chain management, authentication as well as end-user engagement with a single label.

TRME: How is labelling an important part of the oil and gas and the power industries?

CN: Brady Corporation offers solutions that help customers increase safety, security, productivity as well as performance and includes high-performance labels, signs, safety devices, printing systems and software.

Oil and gas has always been an important sector for our solutions. In such challenging applications and environments, professional labelling is of great significance in cable identification, safety identification and other functions, enabling benefits including greater safety and complete traceability.

For example, in the identification of pipelines, we have innovated the labelling solutions to measure pressure, helping with predictive maintenance.

TRME: What are you foreseeing for Brady in the Middle East region during the medium term?

CN: We are looking at expanding our footprint in the region, especially in Saudi



Photo Credit: Brady

Christophe Nelissen, regional manager, Middle East and Southern Africa, Brady Corporation.

“We are looking at expanding our footprint in the region, especially in Saudi Arabia.”

Christophe Nelissen, regional manager, Middle East & Southern Africa

Arabia and at including local talent.

We want to be close to our customers in the Middle East and Africa.

TRME: How are Brady's printers adapting to automation needs?

CN: Brady makes printing easier and more efficient for all identification needs. We are bringing in many innovations for printers, for instance, the printers connected to bluetooth so that there is no longer the need for a keyboard.

Other changes include larger displays with intuitive screens and automating the identification so the printer and applicator reduce errors and save manpower.

Brady has an industrial label printer to suit every application. Brady's latest i5300 Industrial Label Printer is equipped with auto-calibrating, takes just seconds to set up and load, offering a faster, easier start-to-print process. Customers can enjoy time-saving features like a print queue and interrupt function. ■



At Middle East Energy 2022, Brady's focus was on smart labelling solutions and automation.

CompAir launches new compressors in D-Series range

COMPAIR'S NEW OIL-FREE rotary screw compressors' range covers air and water-cooled models from 37 to 75 kW and is available in both fixed and regulated speeds (RS) delivering ISO 8573-1:2010 Class 0 certified 100% oil-free air for the most critical applications such as food and beverage, pharmaceuticals, textile and electronics industries.

No oil is used in the compression elements, for sealing or lubricating the rotors, cooling the compression process directly, reducing the risk of costly downtime and contaminated products.

For RS models, the combination of variable speed operation and hybrid permanent magnet (HPM) motor delivers ultra-efficient performance and lower energy costs. Offering best-in-class efficiency and 30% or more energy savings compared to conventional compressor control, the simple, virtually-maintenance free HPM motor has 60% fewer components than a standard induction version.

Enhanced reliability is another key benefit of the new D-Series range compressors. Meanwhile, an intuitive Xe system controller with integrated speed control, remote communications capability, and extensive events history, enables users and owners to optimise and improve compressor performance.

The new D-Series range from CompAir is



Photo Credit : CompAir

Enhanced reliability is an important benefit of the new D-Series range compressors.

able to withstand the harshest environments and 46°C maximum ambient temperature, reducing unplanned shutdowns caused by high heat and increased productivity.

The iConn feature for real-time online monitoring allows operators to manage the performance of the system through invaluable data statistics and insights. PureCARE, a specially designed service plan for the CompAir oil-free product range, will ensure uninterrupted and uncontaminated compressed air.

David Bruchof, oil-free product manager, said, "Capable of delivering pressure ranges

from 7 to 10 bar and volume flow between 3 to 13 m³/min, CompAir's new D-Series oil-free solutions can be relied on to provide consistent, cost-effective and virtually maintenance-free high-quality compressed air. D-Series range compressors are also offered with an extensive range of options to suit a user's unique requirements. For example, our Energy Recovery System (ERS Ready) is one option for both fixed and variable speed units. This sees compressor operating heat, usually lost to the atmosphere, recovered and repurposed for applications such as hot water, heating, and industrial processes."

FS-Curtis launches new IoT monitoring – FS-SmartConnect

THIS INTUITIVE MONITORING tool will ensure each compressor's system performance, efficiency, and health status are always being optimised. Unlike other monitoring systems, customers will have instant access to their compressor's performance via the Cloud, which will also provide warnings, scheduled maintenance, and customized reports to ensure a more reliable operation.

"SmartConnect represents a significant step for FS-Curtis and our distribution network. It opens the door for our compressors to become part of the smart facilities enabled by Industry 4.0, and consequently opens new doors for our Channel Partners. It not only provides

insight into the operation, health, and energy efficiency of FS-Curtis compressors for end-users but also provides a golden opportunity for the distributor to provide predictive maintenance and expand their footprint into these smart factories," Matthew Smith, vice president of channel partner sales.

The FS-SmartConnect will be available in three servicing options: SmartConnect Insight, SmartConnect Energy, and SmartConnect Premium, where the SmartConnect Insight will be offered as a free option for all compressors 60 HP and above. All three options will come with customer access to the Cloud, mobile alerts, and FS-Curtis Technical Support as standard

features and depending on the option selected will come with customised reports to show a full, in-depth analysis of the compressor's operation and performance.

FS-Curtis is committed to offering a world-class portfolio of products. Through its quality-focused manufacturing, FS-Curtis continues to be a trusted name in compressed air, serving even more markets through its growing global presence.

For more than 160 years, FS-Curtis products have been passed down from generation to generation, proving their value to loyal customers. Its Masterline Compressors remain unmatched in terms of durability and performance, along with the rotary screw and oil-less compressor series.

Fire safety and ironmongery: hand in hand

Daniel May, director, Consort Architectural Hardware explores the close relationship between fire safety and ironmongery and how compliance is compromised without essential hardware components.



*To preserve fire performance
regular maintenance is vital.*

Photo Credit : Adobe Stock

UNPREDICTABLE AND UNTAMEABLE, fire is a beast that we cannot afford to ignore. It doesn't prejudice against any building type, and it can cause immeasurable damage and loss when fire safety isn't prioritised.

Fire safety itself is a complex topic, covering a wide range of subjects and themes, from prevention to containment and evacuation, all of which carry great significance when designing and maintaining a fire-safe building. For a building's architects, specifiers, inspectors and owners, it is imperative to provide an acceptable level of fire safety for occupants and visitors alike. And for this, fire doors play an integral role.

Combined protection

As outlined by the Guild of Architectural Ironmongers (GAI), ironmongery and fire safety share a distinguished relationship. To assure performance and compliance, all dedicated fire doors, other than those to locked cupboards and service ducts, must be fitted with the necessary ironmongery components. This includes hinges, door closers, locks and latches.

Each of these hardware components are

designed to operate in tandem with a fire door – without them, the door is made redundant. The integrity of a fire door could immediately be compromised should one area become damaged or fail to meet strict performance standards. To eliminate vulnerabilities, hardware, in accordance with the UK Construction Products Regulations (CPR) must be CE marked to prove fire performance, and it is a criminal offence to supply products that do not comply.

Fire door closers for example, whether concealed or surface mounted, are required to perform what is considered an essential function in closing a door to completion from any angle into its frame or until the latch engages. Door closers play an active role in ensuring a fire door accomplishes compartmentation. Due to their significance, controlled closing devices must be tested to BS EN 1154 and fire rated to BS EN 1634. Upon application, a closer must also be compatible with a door's existing mechanisms and in addition to CE marking, it is highly advised it should be approved by a third-party scheme such as CERTIFIRE, providing the detail needed for its application.

Maintaining safety and compliance

Under the Regulatory Reform (Fire Safety) Order 2005, should a building fall short in its fire safety practices, the associated party is under risk of receiving heavy penalties and fines. Compliance is a continuous process and so, fire doors and their fitted hardware must remain operational and effective throughout the entire lifecycle of a building.

To preserve fire performance, regular maintenance is vital. Aside from being up to code, the operational functions of all door furniture items should be checked regularly, including any additional mandatory components such as the operating furniture, intumescent seals (designed to expand and hold the door within its frame in the event of a fire) and relevant door signage.

Whether in a commercial, residential, or institutional space, a functional fire door is paramount in delivering a building's fire safety, but only when operating in tandem with ironmongery can it deliver its purpose. All stakeholders and responsible persons must recognise this significant relationship. ■

Shaping the future workforce

The 3t Transform platform helps create safer, smarter and more efficient teams. Dr Grant Crow, managing director and Hiam Saad, head of business development, MENA explain how.

3 T TRANSFORM, PART of the 3t Energy Group, is supporting leading energy companies in the transformation of their workforce management and development, through customised training services that blend learning management, training and competency software.

Through its technology solutions, 3t Transform enhances on-the-job performance by changing the way a workforce prepares for work and tests its skills, including OTR simulators provided through the Group's Drilling Systems arm, as well as VR and digital twin development.

Case studies

3t Transform, working with sister companies in the 3t Energy Group, recently completed an industry-leading project with bp, to create a programme of VR and digital twin-based induction training for the Greater Tortue Ahmeyim (GTA) project.

A bespoke four-week residential blended training programme incorporating different learning technologies was developed for the entire workforce over an 18-month period.

"The feedback from the bp team has been exceptional, with the project outcomes far surpassing initial expectations and demonstrable impact on the ROI. One major outcome was the competency training achieved across the team one year in advance," said Dr Grant Crow, managing director.

"Due to the visual capabilities of VR, we are able to overcome the language and



Photo Credit: Shutterstock

3t Transform is developing pioneering VR training that perfectly aligns with the specific needs of the energy sector.

cultural barriers with learning," he observed.

Another project for Saudi Aramco Nabors Drilling Company, or SANAD, involved an engaging virtual reality training programme to teach land rig workers shut down procedures and to work safely at height and on the drill floor.

In an industry-first, the virtual reality programme automatically links with a custom-built competency management system so SANAD can track and monitor personnel performance.

Benefits of VR

"The repetitive quality of VR benefits the training needs of any workplace that involves

complex machinery," explained Dr Crow.

Building on its already trusted software training platforms, 3t Transform is developing pioneering VR training that perfectly aligns with the specific needs of the energy sector, delivering an immersive experience proven to increase knowledge retention and ROI.

"In fact, we are experiencing a lot of interest in training the younger generation, especially in industries that involve hazardous situations," said Hiam Saad, head of 3t Transform MENA.

The company recently developed a new programme which helps in induction and employee engagement.

The 3t Transform platform can help the digital transformation of any business in any sector.

With offices in the UK, Houston, Beijing and the Middle East, 3t Transform provides unrivalled training management solutions that blend innovative learning technologies and immersive training content, as part of a holistic offering provided by the 3t Energy Group. ■

"The feedback from the bp team has been exceptional, the project outcomes far surpassing initial expectations and there is demonstrable impact on ROI."

The deep impact of HVACR systems

Richard Franks, Gulf business unit director at Conex Bänninger explains how intelligent selection of HVACR systems can optimise energy consumption, save costs and enhance sustainability.

HVAC-R SYSTEMS ARE an essential component of any building, whether it is commercial, residential, or mixed-use. Thoughtful product selection can result in energy, cost, and time savings at every stage of the building's lifecycle, from design through to maintenance.

Variable Refrigerant Flow (VRF) technology optimises energy usage, enhancing comfort. With a conventional HVACR system, it is almost impossible to please everyone as the individual preference for 'comfortable' temperature varies significantly. VRF technology, however, provides the ability to separate areas of a building into controlled zones with programmable thermostats.

By deploying just the right amount of refrigerant needed to cool to the desired temperature, VRF systems run less frequently and at a lower capacity, thus consuming less energy. They are in fact 20-30% more efficient than conventional, ducted HVACR systems which circulate air or chilled water throughout the building.

VRF systems minimise the refrigerant path to allow for maximum efficiency. Comparatively smaller pipework makes copper the material of choice for this technology even though it is often considered a more expensive option.

In the interest of energy efficiency and reduced power consumption, AC pipework

requires high-efficiency heat transfer. Copper pipes and fittings are known for their high thermal conductivity and are more resilient to chemicals that could cause corrosion. The metal will also accept temperature and pressure peaks without degrading the system. These factors combined result in efficiency and durability, requiring less maintenance and a longer lifespan.

A major advancement in joining copper pipework for ACR applications is the use of metallic press fittings instead of brazing. These fittings provide a safer, flame-free alternative to brazing by using a mechanical press tool. Flame-free installations enhance health and safety on-site by reducing the chance of fire and any associated damages to property or human health.

Sourcing ACR technicians can be difficult to source, thus impacting the project's delivery. Modern press technology uses >B< MaxiPro, by which each joint can be executed identically, helping to ensure repeatability and time savings. Our fittings also achieve higher joint integrity through a three-point press system, resulting in stronger and safer systems that are built to last.

HVACR systems with integrated smart technology that is connected to the Internet of Things, are also important in creating a more sustainable urban environment. Through the IoT, smart HVACR systems can be analysed and optimised for more



Photo Credit: Conex Bänninger

Richard Franks, Gulf business unit director at Conex Bänninger.

efficient energy consumption. IoT allows for the real-time monitoring of indoor air quality and even predictive maintenance allowing actions to be performed remotely. This type of HVACR monitoring is valuable in hospitals and laboratories, where the risk of contamination is high and exposure should be minimised.

Smart technology enabled the innovation of Building Information Modeling (BIM) – the collation of multi-disciplinary data into a shared virtual model. This model can be managed through an open cloud platform, accessible by every party involved from architects to MEP contractors. By conducting a BIM-based energy analysis in the design stage, companies have been able to achieve energy savings of 30% for ongoing operations and a 29% return on sustainability expenditures.

Green legislation is a requirement for all new buildings constructed in the Middle East and will be more aligned with those of Europe. Companies prepared for the shift will be well-positioned to support sustainable practices. It is important to ensure systems are built with integrity and efficiency in mind, through thoughtful product selection. ■



Photo Credit: Conex Bänninger

Modern press technology uses >B< MaxiPro, by which each joint can be executed identically.

NEOM launches ENOWA to accelerate connected energy and water services

IN ITS MISSION to accelerate the development of world-leading smart and connected energy systems, NEOM has announced the launch of its subsidiary company ENOWA, which is set to lead the development of its parent company's innovations across the sustainable energy and water system sector.

Work to develop new systems that sustainably and optimally deliver connected and smart energy and water has begun, with the aim of providing the critical infrastructure for a number of NEOM's key projects. These comprise THE LINE, Neom's urban development, OXAGON, its reimagined industrial city, and TROJENA, its sustainable mountain tourism destination. As OXAGON begins to seek tenants for its manufacturing hub, ENOWA will handle the essential development of a clean water and energy supply.



HE Eng Abdulrahman AlFadley, minister of environment, water and agriculture and chairman of ENOWA.

NEOM's aim is to ensure all residents, industries and operators across its projects are powered by affordable and 100% renewable energy. This feeds into its aim to be the first project in the world enabling this at such a scale, hoping to set the benchmark for other sustainability projects around the world.

ENOWA will represent NEOM as the principal shareholder in the world's largest green hydrogen production plant, in an equal-share partnership venture with Air Products and ACWA Power. Set to go onstream in 2025, the plant is anticipated to be the first of a range of similar plants to situate NEOM as the go-to hub for green hydrogen production and innovation.

Hydrogen output from the plant will be exported for use in NEOM projects for a variety of solutions, such as fuelling clean, autonomous electric vehicles.

NEOM's water and wastewater system targets complete sustainability, guaranteeing low-cost water to residents and businesses across the organisation's projects. Powered by solely renewable energy, the advanced desalination plants will not return waste to the sea and will deliver drinkable and mineralised water to all in NEOM, directly to the tap or from a bottling plant.

HE Eng Abdulrahman AlFadley, minister of environment, water and agriculture and chairman of ENOWA, said, "NEOM is committed to sustainability and the creation of a circular economy. This lies at the heart of the project. The creation of ENOWA is a significant development for NEOM and the nation, and it will be the blueprint for developments elsewhere for years to come."

ACME set to offer 3D intelligent vision-guided manufacturing and warehousing robots

ACME HAS ANNOUNCED its latest innovation in the smart robotics sector, with Acme Intralog, a vision-guided robot that utilises intelligent technology for the manufacturing and warehousing sectors.

Acme Intralog will integrate vision-guided intelligent robotics for Middle Eastern manufacture plants and warehouses. Partnering with Mech-Mind, an AI industrial robotics company with offices in Germany, Japan, China and soon the US, the robotic system will be designed with the needs of the warehousing and manufacturing sectors at its core.

The Acme Intralog unit will be designed for vision-guided depalletising, order picking, gluing, mixed palletising, rebar marking, logistics parcel and package picking, and assembly activities across manufacturing and logistic warehouse facilities.

According to Navin Narayan, CEO, Acme Intralog, "Traditional industrial cameras cannot generate high-quality point cloud data. With our partnership with Mech-Mind, we will be able to provide vision-guided intelligent robot solutions featuring faster speed, higher precision, and a larger field of view to produce excellent 3D images of



The solution integrates intelligent, vision-guided learning.

various objects. This will be very useful for logistics and manufacturing sectors. For instance, in a large warehousing facility,

many cases need to be depalletised and the process is complex, which requires high speed and stability.

Along with Acme Intralog, Acme users can benefit from swift access to a suite of innovative vision-based solutions, many of which incorporate Mech-Eye industrial 3D cameras, Mech-Vision graphical machine vision software, Mech-DLK offline deep learning training tools, Mech-Viz intelligent robot programming environments and more.

By integrating with industrial and collaborative robotic systems from Hanwha, Acme can provide a range of palletisation, depalletisation, machine tending, sortation, and bin picking solutions for both manufacturing and intralogistics industries across the Middle East.

"The traditional industrial robots cannot deal well with random pallet patterns and many cartons in various sizes and shapes. Using AI algorithm, our vision-guided robot will be able to easily recognize dark or white objects, tapes, cable ties, labelled objects, and the direction of stripes on cartons and thus, automatically complete depalletising and palletising in an efficient and prompt manner."

The power of partnerships

Strategic partnerships are vital for any technology company wanting to grow its business. Here, Maria Shiao, chief sales officer at Fotech, outlines the key strategies for bringing strategic partnerships into industries beyond IT, how to choose the right partner and how to make it successful for a healthy bottom-line.

Accelerating growth

In the IT space, strategic partnerships have been commonplace for decades. They are broadly accepted as being critical for organisations whose strategic goals are to expand their business and to find new revenue streams.

Ecosystems – a network of interconnected partners – are emerging that make it much easier for organisations to extend their reach far beyond their traditional areas. To remain competitive, physical industries and companies need to take the successful strategic partnership model from the digital sector, to think outside of their silos and to embrace thriving ecosystems.

Putting it into practice

At Fotech, we are transforming our business value proposition by engaging with technology and solutions partners. We have ambitious growth plans and recognise that we can't get to where we want to be without strategic partners. Indeed, we are committed to building these relationships, and have recruited our global strategic partnerships manager. Leveraging best practices long proven in the IT sector, we are defining and implementing Fotech's partnership strategy and structure, and creating the framework that will enable our scale-up via ecosystem thinking.

We can learn a lot from the digital space, specifically related to finding strategic

Its important to first understand what type of partners you want and to define your partnership structure.



Photo Credit: Fotech

Maria Shiao, chief sales officer at Fotech.

partners and engaging with them. Its important to first understand what type of partners you want and to define your partnership structure. You must also consider where you fit into the ecosystem.

Selecting the perfect partner

There are various factors to take into account about when it comes to choosing appropriate strategic partners:

- Is the company known for being 'partner friendly'? Do they have a team to manage their strategic partnerships and how invested are they in getting to know and to understand your business and technology?
- How many other strategic partnerships do they have? Is there a hierarchy? Understand how you might fit in to that.
- Consider the partner's brand equity, market share and market power. How are they positioned in the market and will they complement your interests?

- Are their objectives aligned with yours?
- Are they culturally aligned with your brand?
- Consider what you want to get out of the strategic partnership – is it purely sales or brand recognition, or ideally both?
Making a partnership work
Having identified a company with whom you want to enter a strategic partnership, it's critical to make it a success. There are a few hurdles to overcome.

The first is trust. While creating trust is one of the biggest challenges in strategic partnerships, it is the cornerstone to the partnership's ultimate success.

The second is defining boundaries. One example where strategic partnerships can get uncomfortable is engagement with end customers. Defining at the outset who is doing what and drawing the boundaries on, for example, who will be selling to whom, avoids misunderstandings later down the line.

Third, clear and open communications from the beginning is vital for the long-term success of any strategic partnership. Effective, frequent and authentic ongoing dialogue and engagement between the teams is crucial if the partnership is to meet its targets.

Finally, define what success looks like, set clear, tangible goals (whether financial or other KPIs) and regularly review them. Building a framework to audit and to check on each other's activities builds trust. For example, some partners may not measure revenue, instead being concerned with the number of businesses they sign, but revenue targets might be critical to your operation. It is also a good idea to consider how success is incentivised and ensure it is aligned between both companies.

By replicating the successful strategic partnership model from the IT sector, other physical industries can reap the benefits these ecosystems bring. They have been a central way of working for the IT industries and now, driven by digital transformation, other industries can realise the benefits and accelerate their growth too. ■

Project Databank

Compiled by Data Media Systems

CONSTRUCTION AND REAL ESTATE PROJECTS, OMAN

Project Name	City	Facility	Budget	Status
Al Khalili Group - Azaiba Development	Muscat	Residential Development	110,000,000	Construction
Al Madina Real Estate - Multi-Specialty Hospital	Muscat	Medical/Health Facilities/Spa	500,000,000	Design
Al Mouj Muscat - Mised-Use Development	Seeb	Mixed-Use Development	1,100,000,000	Construction
Al Raid Group - Al Araimi Walk	Barka	Malls/Retail Outlets	291,000,000	Engineering & Procurement
Alargan Towell Investment Company - Al Nakheel Integrated Tourism Complex (ITC)	Barka	Mixed-Use Development	688,000,000	Design
Alfardan Group - St Regis Al Mouj Muscat Resort	Seeb	Beaches and Resorts	250,000,000	Construction
AQAR - Mixed Use Development	Duqm	Mixed-Use Development	1,000,000,000	Design
ASAAS - Al Hafa Waterfront	Dhofar	Mixed-Use Development	400,000,000	Construction
ASAAS - The National Leisure & Tourism Destination (Hayy al Sharq) - Overview	Barka	Theatre/Entertainment/Leisure Facilities	1,200,000,000	Design
Bin Sheikh Holding Company - Oman Gate Project	Seeb	Mixed-Use Development	45,000,000	EPC ITB
Bin Zayed International Investment Group - Duqm Commercial Tourist Gate	Duqm	Mixed-Use Development	99,000,000	EPC ITB
Eagle Hills Muscat - Mandarin Oriental Muscat	Muscat	Hotels	351,000,000	Construction
Elixir United Investment - Specialty Hospital	Muscat	Medical/Health Facilities/Spa	260,000,000	Design
Gebze Organized Industrial Zone - Turkish Industrial Zone	Duqm	Industrial Park	10,000,000,000	Project Announced
Khazaen Economic City - Overview	Batinah	Mixed-Use Development	500,000,000	Construction
Maysan Properties - Maysan Square Business Park	Duqm	Mixed-Use Development	112,000,000	EPC ITB
Ministry of Education - 40 New Schools	Various	Schools/R&D/	120,000,000	Project Announce
Ministry of Health - Barka Medical City	Batinah	Medical/Health Facilities/Spa	800,000,000	Feasibility Study
Ministry Of Health - Khasab General Hospital	Musandam	Medical/Health Facilities/Spa	158,000,000	Construction
Ministry of Health - Mahoot General Hospital	Mahoot	Medical/Health Facilities/Spa	100,000,000	EPC ITB
Ministry of Health - Sultan Qaboos Hospital	Salalah	Medical/Health Facilities/Spa	350,000,000	Construction
Ministry Of Health - Suwaiq General Hospital	Batinah	Medical/Health Facilities/Spa	68,000,000	Construction
Ministry of Health - Thumrait Healthcare Centre	Dhofar	Medical/Health Facilities/Spa	100,000,000	Design
Ministry of Heritage and Culture - Yenkit Hills Project	Muscat	Beaches and Resorts	156,000,000	Project Announced
Ministry of Housing - Schools & Health Centre, Liwa	Sohar	Mixed-Use Development	70,000,000	Construction
Ministry of Transport - Al Buraimi Free Zone	Buraimi	Duty Free Zone (DFZ)	60,000,000	Project Announced
Ministry of Transport - Musandam Free Zone	Musandam	Duty Free Zone (DFZ)	60,000,000	Project Announced
Ministry of Transport Commu -	Muscat	Logistic Hub	150,000,000	Feasibility Study
Ministry of Transport - Tourist Harbours Muscat Airport Cargo Village	Musandam	Mixed-Use Development	60,000,000	PMC ITB
Muscat Municipality - Muttrah Redevelopment	Muscat	Mixed-Use Development	124,000,000	Design
Muttrah Tourism Development Company- Mina Sultan Qaboos Waterfront	Muscat	Mixed-Use Development	1,000,000,000	Design
Oman Investment Authority - Yiti Sustainable City	Yiti	Beaches and Resorts	2,000,000,000	Design
Oman WanFang - Sino-Oman Industrial City	Duqm	Industrial Park	10,000,000,000	Construction
Omran - Hotel 3 (Ibis Styles)	Muscat	Hotels	90,000,000	Design
PEIE - Ibri Industrial City	Ibri	Industrial Park	50,000,000	Engineering & Procurement
PEIE - Motcar Project	Sohar	Souk/Markets	50,000,000	EPC ITB
PEIE - Oman Nano City - Overview	Sur	Industrial Park	780,000,000	Project Announced
PEIE - Sohar Industrial Estate Phase 7 -	Sohar	Industrial Park	55,000,000	Construction
PEIE - Sur Industrial Estate Expansion	Sur	Industrial Park	50,000,000	Construction
Qatari Diar Ras Al Hadd Development Co.	Ras Al-Hadd	Mixed-Use Development	650,000,000	Construction
Quriyat Dev't Co - Quriyat Integrated Tourism Complex	Muscat	Mixed-Use Development	1,000,000,000	
Renaissance Duqm Holding - Renaissance Village	Duqm	Residential Development	30,000,000	Construction
Royal Court Affairs - Oman Across Ages Museum	Manah	Entertainment/Leisure Facilities	371,000,000	Construction
Royal Oman Police - Athaiba Beach Club Hilton Resort	Muscat	Beaches and Resorts	100,000,000	Design
Saraya Holding - Muscat Bay	Muscat	Beaches and Resorts	80,000,000	Construction
Sky Line Duqm - Integrated Tourism Complex (ITC)	Duqm	Hotels	748,000,000	Construction
Sohar Port and Freezone - Freezone Sohar	Sohar	Duty Free Zone (DFZ)	2,000,000,000	Construction
SDIC - Yiti Sustainable Tourism City	Yiti	Mixed-Use Development	1,000,000,000	Design

Project Databank

Compiled by Data Media Systems

Project Focus

Compiled by Data Media Systems

Al Hadeetha Resources - Washihi Copper-Gold Processing Plant

Name of Client	Al Hadeetha Resources
Revised Budget (US\$)	50,000,000
Award Date	2019-Q1
Main Contractor	China National Geological & Mining Corporation (CGM)
Facility Type	Gold, Copper
Status	Construction
Location	Al Dakhiliya, Oman
Project Start	2015-Q3
End Date	2022-Q4

Background

Alara Resources Limited plans to establish an 1,000,000 tons per annum (tpa) capacity copper-gold processing plant in the Sultanate. The project, also known as the Washihi/Daris Copper Gold Project, centres on a proposal to process mineral ores extracted from deposits discovered in the Washihi and Daris areas of the Dhakhiliyah and Batinah North governorates respectively of the Sultanate. An assessment of the larger Washihi prospect pegged the mineral potential of the resources at an indicated 6.84mn tons of ore bearing 0.90% copper and 0.17 grams/tons of gold, and an inferred 7.27mn tons bearing 0.71% copper and 0.20 grams/ton of gold.

Measured and indicated estimates of the Daris Prospects comprise 240 kilo tons of sulphide ore at 2.37% copper and 183 kilo tons of oxide ore at 0.72% copper respectively.

Project Status

Date	Status
Mar 2022	Pre-production activities have commenced at the mining site after the recent formal commissioning of the pre-stripping of Washi Majaza pit. Pre-production activities include blasting, excavation works, transporting of overburden, and construction of waste rock dump platforms and roads. 70% of the procurement is complete.
Jan 2022	The Water and Wastewater Services Company has signed an agreement with Al Haditha to supply the project with treated water for 10 years. Al Haditha, under the agreement, will upgrade the capacity of Al Mudhaibi Sewage Plant to 1800 cubic metres per day.
Jan 2022	Sohar International has signed an agreement with Al Hadeetha Resources to extend US\$49mn worth of financing to the project. The factory will be inaugurated in November 2022.
Dec 2021	Engineering and procurement continue to progress with 63% of the engineering having been completed already. The construction of the accommodation village is nearing completion. The village occupancy will begin in January 2022.
Oct 2021	Al Hadeetha Resources has awarded contracts worth US\$17.8mn for the procurement and construction of the plant. The awarded contracts are: - Ball mill and sag mill crusher: CITIC (China) - Apron feeder: L&T (India) - Pan feeders: Metso-OT (India)

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شاحنة «أتيجو 1726» من «مرسيديس . بنز» توجت كأفضل شاحنة مهام متوسطة للعام في حفل توزيع الجوائز الخاصة بالصناعة المستقلة



شاحنة «أتيجو» حصلت على لقب «شاحنة المهام المتوسطة» للعام



أولاف بيترسن خلال استلام الجائزة في دبي

للمركبات التجارية، نسعى جاهدين لتوفير أفضل المنتجات والخدمات للعملاء الكرام هنا في المنطقة. نحن نقدم خدمات كاملة للعملاء، وشاحنات «أتيجو» متعددة الاستخدامات ذات المهام المتوسطة توفر الحلول المناسبة لجميع العملاء بمختلف متطلباتهم».

أقيم حفل توزيع الجوائز الخاصة بالشاحنات والأسطول لعام 2022 في دبي في 28 فبراير لدى فندق «رافلز دبي». ويُعد هذا التكريم بمثابة شهادة على جودة المركبات والخدمات، فضلاً عن مكانة شركة (DCV MENA) في السوق الإقليمية. تمثل شركة (DCV MENA) شاحنات وحافلات شركة (Daimler) من خلال شبكة تضم أكثر من 30 موزعاً عالمياً لشاحنات (Mercedes-Benz)، و(FUSO) في منطقة الشرق الأوسط وشمال إفريقيا. يقع مقر شركة (DCV MENA) في المنطقة الحرة بجبل علي في دبي حيث يُعد واحد من ستة مراكز إقليمية حول العالم.

لمزيد من الاستفسارات الإعلامية، يرجى الاتصال: «محمّد شديد» لدى شركة «برازن» منطقة الشرق الأوسط وشمال إفريقيا الهاتف: +971561447708 - +971507719282 بريد إلكتروني: daimler@wrebrazenpr.com

استحوذت شاحنة «أتيجو 1726» على أكبر عدد من الأصوات في فئتها؛ شاحنة (Euro 5 FUSO Canter)، وشاحنة (FUSO eCanter)، مع تكريم (Daimler) للمركبات التجارية الشرق الأوسط وشمال إفريقيا والإدارة الذكية لأسطول الشاحنات مع نظام «فليت بورد».

التحكّم عن بعد

تفخر شركة (Daimler) للمركبات التجارية الشرق الأوسط وشمال إفريقيا (م.م.ح) بالإعلان عن حصول شاحنة «أتيجو 1726» من (مرسيديس . بنز) (MERCEDES-BENZ) على لقب «شاحنة المهام المتوسطة للعام» في حفل توزيع الجوائز الخاصة بالشاحنات، والإدارة الذكية لأسطول الشاحنات في دبي. تم ترشيح 5 مركبات للفوز بالجائزة، إلا أن شاحنة «أتيجو 1726» استحوذت على أكبر عدد من الأصوات في الفترة التي سبقت الحدث، لتحصّل بذلك الجائزة المرموقة.

تعتبر مجموعة «أتيجو» عضواً مهماً في محفظة شاحنات (MERCEDES-BENZ) ذات المهام المتوسطة في منطقة الشرق الأوسط وشمال إفريقيا، يتميز تصميم «أتيجو» بالأداء العالي وسعة التحميل الكبيرة، إلى جانب تكلفة التشغيل المنخفضة وسهولة الصيانة، بالإضافة إلى متانتها إذ تتمتع المركبة بوزن إجمالي يصل إلى 17.1 طنّاً لتلبية الاحتياجات المختلفة لنقل البضائع. تُعد من الشاحنات التي يمكن الاعتماد عليها والثوق بها فهي متعددة الاستخدامات شديدة التحمل ومناسبة للمسافات القصيرة والمتوسطة. كل هذه المميزات وأكثر تبرز مدى خبرة شاحنات (MERCEDES-BENZ) التي تزيد عن 125 عامًا في قطاع صناعة شاحنات النقل.

صرح «أولاف بيترسن» مدير عام شركة (Daimler) للمركبات التجارية الشرق الأوسط وشمال إفريقيا (ش.م.ح) قائلاً: «نشعر بالفخر والسعادة لتلقي الجائزة ونود أن نشكر كل من صوت لشاحنة «أتيجو 1726» من (MERCEDES-BENZ). تتميز هذه الشاحنة متعددة الاستخدامات بالتنوع والقابلية للتعديل من المصنع بمواءمة أي طراز بسهولة لتلبية الاحتياجات المهنية لكل عميل، وهي رائدة في قطاع الشاحنات ذات المهام المتوسطة في المنطقة مع ناقل الحركة الأوتوماتيكي».

تم تجهيز شاحنة «أتيجو 1726» بنظام الدفع 4x2 أو 4x4، ومقصورة داخلية تتميز بالراحة والراحة من طراز (S-Cab) تسج سائق وراكب، أو من طراز (L-Cab) تسج سائق وأكثر من راكب، تتوفر الشاحنات بنظام دفع 4x4 بمقصورة من طراز (S-Cab) فقط. يتمتع هذا الطراز من الشاحنات بمحركات ذات 6 أسطوانات مستقيمة بقوة 256 حصاناً، عالية التقنية تعمل على إطلاق أقل نسبة انبعاثات فهي صديقة للبيئة مطابقة لمعيار الانبعاثات الأوروبي (Euro V)، تم تصميم مجموعة نقل الحركة في «أتيجو 1726» لأعلى أداء وكفاءة ومتانة، كما أن التدابير الفنية للشاحنة تضمن استمرار انخفاض التكاليف لكل كيلومتر على مدار عمر خدمة الشاحنة بأكملها. وبالإضافة إلى الدفع الثاني 4x2، تتميز شاحنات الدفع الرباعي 4x4 بزيادة ارتفاع القاعدة عن الأرض وقدرة جر أفضل على الأراضي الوعرة مما يجعلها مثالية للعمليات على الطرق الممهدة والطرق الوعرة للمهام الثقيلة مثل جمع مخلفات البناء أو القمامة.

تم ترشيح شاحنة (Euro 5 FUSO Canter)، وشاحنة (FUSO eCanter) للفوز بالجائزة في حفل توزيع الجوائز في فئة شاحنات المهام الخفيفة للعام والثناء على كلتا الشاحنتين عقب عملية التصويت. ولقد حازت (Daimler) المركبات التجارية الشرق الأوسط وشمال إفريقيا والإدارة الذكية لأسطول الشاحنات مع نظام «فليت بورد» التحكّم عن بعد، على الإشادة في فئتي أفضل مصنع للعام والتحكّم في أسطول الشاحنات عن بعد برئاسة لجنة تحكيم مستقلة لكل فئة.

وعلق «أولاف بيترسن» قائلاً: «في شركة (Daimler)

مفكرة الفعاليات 2022

تاريخ	المؤتمر العالمي للمرافق	أبو ظبي
9 - 11 مايو/أيار	معرض هانوفر للأعمال الهندسية والمعدات الصناعية	هانوفر
25 - 28 يونيو/حزيران	معرض بيغ فايف مصر للإنشاءات	القاهرة



الإطار القانوني الحاكم للاستثمار الأجنبي يلعب دوراً ملحوظاً في زيادة القدرة الكهروضوئية في المنطقة

توقعات باحتمام المنافسة على الاستثمار في الطاقة الشمسية بالسعودية

أوضحت بيانات صادرة عن شركة «فينجر جرين»، الرائدة في مجال الطاقة المتجددة، الستار عن فرص الاستثمار في الطاقة الشمسية الكهروضوئية، وإمكاناتها في كل من السعودية وسلطنة عمان والأردن ومصر، وذلك في إطار تقرير صادر عن شركة «سولار باور أوروبا». فقد كشف أنتوني بوسارد، الشريك الإداري لشركة «فينجر جرين»، أن قطاع الطاقة الشمسية الكهروضوئية في الشرق الأوسط من المتوقع أن يزدهر خلال السنوات الخمس المقبلة في ظل أهداف الطاقة المتجددة الطموح، وزيادة تحرير الأسواق، والإمكانات الهائلة للطاقة الشمسية.

وكشف تقرير «سولار باور أوروبا» أن مصر تعمل على إعادة وضع نفسها في مصاف البلدان الرائدة في المنطقة في مجال الطاقة. فهي لديها طموحات كبيرة للاستثمار في الطاقة النظيفة، وياتت نموذجاً لدول الجوار في ربوع الشرق الأوسط وإفريقيا. كما استأنفت سلطنة عمان خطتها التنموية الطموح الخاصة بالطاقة المتجددة على إثر نجاحها في توفير التمويل اللازم لأول محطة ضخمة للطاقة الشمسية. وسوف تكون هذه المحطة واحدة من ركائز نجاح الدولة على صعيد تحول الطاقة.

وفي إطار برنامج المؤتمرات خلال فعاليات «معرض الشرق الأوسط للطاقة»، ركز «المنتدى العالمي للطاقة والمرافق» على قضية التمويل، فكانت الجلسة الافتتاحية بعنوان «تمويل عملية تحول الطاقة». إذ تفيد «الوكالة الدولية للطاقة المتجددة» أن تقنيات تحول الطاقة ستحتاج إلى استثمارات تبلغ نحو ١٣١ تريليون دولار أمريكي بحلول عام ٢٠٥٠. وناقش هذا الموضوع وغيره من الموضوعات الحيوية المتعلقة بقضية التمويل ككل من السيد تيم بالمر، رئيس قسم الطاقة المتجددة وتحول الطاقة بالهيئة البريطانية لتمويل الصادرات، والسيدة جورميت كور، إحدى شركاء شركة «بيتست ماسونز»، والسيد راجيت ناند، مستشار المدير التنفيذي لشركة «أكوا باور».

وخلال حديثه عن الإقبال على تمويل الصادرات، قال بالمر: «منذ إنشاء قسم الطاقة المتجددة وتحول الطاقة منذ ما يزيد قليلاً على عام، شهدنا إقبالاً ملحوظاً على عروضنا، لدرجة أننا نتطلع بالفعل إلى توسيع فريقنا، وهذا يؤكد على الطلب داخل السوق. فالمصدرون والمقاولون يأتون إلينا عبر مختلف قطاعات الطاقة المتجددة، سواء في التقنيات المتقدمة أو المبادرات الناشئة».

فقد قال بوسارد، خلال الكلمة التي ألقاها في «مؤتمر إنتر سولار» خلال فعاليات معرض الشرق الأوسط للطاقة الذي استضافته دبي: «تعتزم السعودية زيادة محطاتها الكهروضوئية بإضافة ٩,٥ جيجاوات بحلول عام ٢٠٢٣، وسيتوقف تحقيق هذا الهدف على قيام صانعي السياسات بتعديل الإطار القانوني المنظم للاستثمارات الأجنبية والطاقة المتجددة. هذا - مع مواصلة العمل على تحرير الأسواق - هو السبيل لنجاح السعودية في إطلاق إمكاناتها الكاملة في مجال الطاقة الشمسية».

ويفيد التقرير أن «البرنامج الوطني للطاقة المتجددة» الذي وضعته السعودية، سيكون الآلية لتحقيق «رؤية المملكة ٢٠٣٠»، وهذه الرؤية تتنبأ بزيادة استهلاك الطاقة ثلاثة أضعاف بين عامي ٢٠١٦ و ٢٠٣٠. وأضاف بوسارد قائلاً: «يفضل هدف وزارة الطاقة المتمثل في زيادة حصة الغاز الطبيعي ومصادر الطاقة المتجددة بنحو ٥٠ في المائة بحلول عام ٢٠٣٠، توجد فرص كبيرة لاستثمارات القطاع الخاص وشركات القطاع العام التي جذبت بالفعل انتباه شركات أمثال أكوا باور وكهرباء فرنسا ومصدر (شركة أبوظبي لطاقة المستقبل) وجينكو سولار». وسلط التقرير الضوء على خطط الأردن لتقليل اعتماده على الوقود الأحفوري المستورد، كما وضع هدفاً طموحاً لاستخدام الطاقة المتجددة، إذ من المقرر أن تصل نسبة توليد الكهرباء من مصادر الطاقة المتجددة إلى ٣١ في المائة بحلول عام ٢٠٣٠. كما كشفت البيانات عن تحقيق إنجاز ملحوظ بين عامي ٢٠١٥ و ٢٠٢٠ من خلال زيادة حصة الطاقة المتجددة في مصادر الكهرباء من ١ في المائة إلى ١٤ في المائة. ومع ذلك تحدث الفرير عن أهمية اتخاذ تدابير جريئة لتحقيق الأهداف المنشودة وضرورة عمل القطاعين العام والخاص جنباً إلى جنب،

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الوكيل البريدي بالولايات المتحدة: النشرة التقنية - الشرق الأوسط Technical Review Middle East ISSN 0267 5307
تتشرها ست مرات في العام. لقاء 99 دولاراً أمريكياً. شركة آلان تشارلز للنشر
Alain Charles Publishing, University House, 11-13 Lower Grosvenor Place, London, SW1W 0EX, UK
يتم سداد ثمن المجلات لدى: Rahway, NJ

مدير البريد: أرسل التضمينات إلى: Alain Charles Publishing Ltd, c/o Mercury Airfreight International Ltd, 365 Blair Road, Avenel, NJ 07001, US
Agent: Pronto Mailers International, 200 Wood Avenue, Middlesex, NJ 08846

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رئيس مجلس الإدارة: دريك فوردهام

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TECHNICAL REVIEW MIDDLE EAST الشرق الأوسط

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