



Editor's Note

Dear reader.

The mining of aluminium and the management of human resources in the Middle East is a complex and rapidly evolving field. Every day brings a new set of challenges, opportunities, and, of course, skills. The phrase "working in the aluminium mining and HRM sector" has taken on new connotations during the past decade.

We gathered a small group of HRM and aluminium mining experts from a variety of backgrounds last month to talk about these shifts. Experts such as Mohammed Al Hijan, Chief Human Resources Officer, King Saud University, Sara Parvaiz Amjad, Assistant Dean of Administration in Student Affairs at New York University Abu Dhabi, Arul Savio Pinto, Consultant, WellKom International, Maria Zyryanova, Business Growth & Strategy Consultant, Adaptability, AQ & Human Development, Sahim Amin Gadawala, CEO & Vice President of Ala Group, Caroline Werunga, Regional HR director, FieldCore, not only shared their experience but also provided their views on the future growth of these two sector.

We looked into healthcare HRM and aluminium mining in the present day with an eye towards sustainability and a zero-impact footprint. In addition, these experts presented all information in the most favourable geographical contexts.

We have planned this issue around these special, in-depth chats with notable figures. This collection of stories is both brief and powerful.

If there are other topics you would like to see us cover send me an email at editor@secretariatsworld.com

Nitin Konde Editor

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CONTENTS

Editor's Note 02 Mohammed Al Hijan: "Adaptability Is 07 The Right Card To Promote	The Adaptable Workplace is Purposeful, Inclusive, and Collaborative	16
Diversity"		
	Promoting female equality in the Arab world's workforce through diversity	23
	FieldCore's Caroline Werunga: "Covid-19 Has Given Birth To New Work Culture"	28
	New Methods for Promoting Diversity and Equality in the Middle East	32
	What the Middle East can learn from AI-powered big data analytics	38
The path to sustainable HRM in the 12 Middle East	Sara Pervaiz Amjad shares broader prospective of D&I	44

CONTENTS



Adaptability Is A Must In The
Business Sphere: Pinto

49

"Aluminium Industry Is Spreading Its 54 Wings In Middle East Region": Sahim Amin Gadawala On Recent Regional Boom

Insight into the Prospects of Mining and sustainability in the Saudi Arabia 58

Middle East Aluminum and the Environment: Carbon Dioxide Emissions and Beyond	63
The Middle East and gender parity in technology: ahead or behind?	68
Patterns of Aluminum Reuse in the Arab World	72
Middle East is mining minerals with sustainability as its leading tool	77
The sustainable development objectives of the Middle Eastern aluminium industry are being aided by cutting-edge technological innovations	84

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MOHAMMED AL HIJAN: "ADAPTABILITY IS THE RIGHT CARD TO PROMOTE DIVERSITY"

Success depends on one's flexibility in the face of constant change. To be more precise, adaptability is "the capacity, competence, attitude, willingness, and/or motivation of an individual to modify his or her behaviour in response to variations in task, social, or environmental factors." One of the most valuable mental capacities is the capacity to shift gears. More mental reserves are available to people who are very adaptable compared to those who are less so.

One who can readily accept and adjust to new circumstances is said to be highly adaptable. It's not only about being open to new experiences in the workplace but in every aspect of our lives. Therefore, one should be ready to embrace and adjust to change. One can't deal with it or become robust if one refuses to accept it. Therefore, the very system needs to embrace the shift.

In 2020, especially in those first few months, no one believed that the COVID-19 pandemic could potentially wipe out humanity. Its only now that humanity has come to terms with a new normal.

Speaking out his views on the subject, Mohammed Al Hijan, Chief Human Resources Officer, King Saud University stated, "By 2022, the United Nations has set 17 targets for eradicating miss-leading practices as part of its Sustainable Development Agenda.

"I'll list a few quickly: an end to poverty, hunger, poor health, inadequate education, lack of opportunity for women and girls, lack of access to safe drinking water, and so on. As a result, equitable distribution of resources is vital to creating sustainable cities and communities.

"Most nations are working together to achieve the United Nations' Sustainable Development Goals. Therefore, there will be a shift, and that will have consequences for long-term stability. It's in our nature to adjust to new circumstances and forge ahead in pursuit of novel endeavours since that's what life is all about.

"Believe me, if you're living your life with a purpose, you'll have no trouble adjusting to the new circumstances. Effective communication is crucial. You can't keep yourself isolated from the group. As a result, the quickest way to adapt to the new circumstances is to talk to people about it."



COVID-19 Changed The World Works

The pre-COVID-19 culture is distinctly different from the post-COVID-19 culture. The way that leaders and managers think has shifted as well. They were exceedingly stringent prior to COVID-19 and were essentially making up the regulations as they went along.

They failed to include the human element of workers, which is crucial in many societies. The norm prior to the release of COVID-19 was an early morning arrival to the office, with the understanding that tardiness would not be tolerated.

Some of the groups acted like dictators. Workers are not allowed to argue, and instead must blindly carry out the inappropriate directives of upper management. The ideal culture of the present differs from that of the past.

Leaders should provide a good example for their team members. For instance, it would be inappropriate for a CEO to just internalise his company's objective and vision without ever sharing them with his staff or directing them to do so when asked. He must join in with the group. He must share their pain and show them how to persevere. Employees will naturally follow one's guidance if he takes the time to think about his actions and employs techniques.

"Call the group into your office if you have ideas for the department's primary objectives, and hear them out. You unquestionably know the solution, as you are more knowledgeable in this area than they are."

"However, if you were to ask them do you have any thoughts? Is it a good idea? Tell me what do you think; I want to get them involved. Give them time to talk it over. They'll offer their advice and help put your plan into action."

"Transparency is the second instance. You must be forthright while discussing human resources personnel. You can't keep secrets if you're in a position of power. It's important to be transparent with potential hires about income, experience required, and duties. And don't try to sneak it under the table; it needs to be posted publicly. You owe an apology to any applicant you treated rudely or passed over in favour of another. This exemplifies the best aspects of our society" commented AlHijan.

Remote work is a common practice these days. In addition, many businesses today have a "hybrid" structure, with employees splitting time between the workplace and their homes. So, let's find out how working from home impacts efficiency. Do we have everything we need to succeed? We do, obviously, because we learned through COVID how to be ready for anything. "I'll use a school or university as an illustration. They are taking the courses digitally rather than physically attending the university. We initially rejected this on the grounds that it seemed to imply that the educational process was insufficient. Our offspring now know more than we ever did, and we can see that back then, like now, the process was excellent, the resources were readily available, and output was high," said AlHijan

"Let me give you another example: if I needed to host a meeting at a five-star hotel, I'd probably call a few of the company's directors, a close personal friend, or someone in human resources and ask them to join me for a supper lunch including European cuisine, Indian cuisine, Saudi cuisine, or any other exotic cuisine. But no longer. For the simple reason that doing so will result in higher costs and the loss of a valuable employee.

"However, using e-learning, you may design and pinpoint the course based on their feedback. They get to decide when is convenient for them. When an employee isn't a morning person, he or she may prefer working late instead. That's why you look out for your staff as a whole," he added further.



Women are making the change

The rapid dissemination of COVID-19 has brought gender differences into sharper focus. For instance, many women still hold the view that they are expected to do the majority of housework and childcare. As a result, many individuals have struggled to maintain boundaries between their private and professional life during COVID-19 quarantines.

Some of the most powerful women in the Gulf's financial sector got together for a recent event called "How Women Rise: Influential Women in Middle East Finance," where these and other issues were discussed. The A Fair Share initiative of the G.C.C., which promotes gender balance in the banking sector and encourages women to succeed in their careers, made it feasible for this dialogue to take place in a prominent media outlet.

The pandemic has dramatically altered the global distribution of women. Middle East correspondent and panel moderator Zainab Fattah said, "Many working mothers have been hit with the double whammy of keeping down a career and dealing with childcare and education." Despite widespread optimism that the pandemic will pass quickly, experts warn that it could have lasting effects on women's economic security and opportunities across sectors.

Shedding his views on the topic, AlHijan said, "Women and men in Saudi Arabia are on equal footing. Even if we talk about the women in my family.

"Whether they are my mom, my sister, or my aunt, it doesn't matter. At home, you must provide accommodations for her, assist her, provide her with a means of support, and provide her with a regular source of income. Because she is now under your care and protection, you must ensure her safety.

"You are the man, so you must be able to comprehend and control her mood swings and erratic behaviour. You can't overlook this fact. Therefore, women have a very advantageous position and a wealth of career opportunities.

"There are sizable numbers of women serving in the armed forces throughout a variety of government departments, including Defense, Interior, Education, and others. They work for the Ministry of the Interior, namely the internal police division. Therefore, they live our sisters and we work together to advance the interests of our nation."

Challenges And Ways To Overcome

AlHijan feels that there are certain challenges in the region and these can be fixed by various engagements through dialogues and discussion.

"Employee participation is essential. For example, we represent a wide range of countries here. This is a tremendous asset, and you should encourage them to flourish in their roles. They need a chance, and you must provide it.

"That doesn't just mean not reserving opportunities for people of a certain nationality. You need to provide people of other nationalities a voice in your company so that they can be considered for leadership roles and promoted within the company. For instance, your company's board of directors should contain strong female leaders. This is a fantastic show of leadership and support," he opined.

"I think there are rules that can act as a buffer and that should promote tolerance and diversity. You shouldn't specify "this position is for women" and "this position is for men" while advertising a job opening, as I indicated earlier.

"You can just put up the advertisement and then choose among the applicants who respond. So, one of the issues is, obviously, how to alter the organisation's rules and regulations," he added further.

Mohammed Al Hijan enjoys socialising with his loved ones. "If you want to be exceptional", he tells the younger generation, "Don't turn down any work and make sure you're always learning by reading the latest articles".

"You shouldn't sacrifice time with your loved ones. Spend time reading, playing, travelling, swimming, or doing anything else that brings you joy.

"Because then you can experience the sweetness of living. But if you let yourself become preoccupied with just one aspect, it will drain you dry.

"Maintain harmony between your professional and private life," he says.



All Photos Are Provided By Mohammed Al Hijan

THE PATH TO SUSTAINABLE HRM IN THE MIDDLE EAST

In the last two years, the workplace has become increasingly global. In what is known as the hybrid arrangement, businesses no longer required employees to be physically present at the office in order to get their work done.

The human resources department faces difficulties in keeping up with the game of a sustainable workforce, despite the fact that many of these changes aim to guarantee business continuity and improve the employees' work-life balance.

Human resource managers have a lot on their plates these days, what with employees tiring of their jobs, a rise in attrition rates, a greater demand for flexible workplace arrangements, and so on. According to Ellen Fullido, president of the People Management Association of the Philippines (PMAP), this trend can be summed up by the phrase "great reawakening of employees," in which workers come to terms with the fact that they require a job that allows them to thrive professionally, find meaning in their lives, and support their loved ones.

"Veteran workers must adapt to new technologies, shifting markets, international crises, and, of course, the unavoidable incorporation of Generation Y, a group of ambitious young adults born between 1982 and 2002," stated Fahad Al Abdulkarim, Human Resource Director, Procter & Gamble, Arabian Peninsula.

The Middle East's ultra-competitive labour market has been profoundly altered by the confluence of demographic shifts, institutional reform, and the strong forces of globalisation. In addition, it has reinforced the importance of implementing cutting-edge human resources practices that make employee satisfaction a priority in every company. Indeed, in the modern era, the key to maximising peak performance, maintaining low employee turnover, and accomplishing long-term business objectives is to cultivate a dynamic, diverse corporate environment that encourages productivity, creativity, and innovation.

"We think it's high time for competing businesses to adopt a similar approach to staff motivation. Job security, optimism, and confidence are all things of the past in today's job market; long gone are the days when a fresh college grad would join a business and remain there until retirement. The old rules no longer apply, and high job turnover, rising recruitment costs, and poor employee retention rates are problems across all sectors," stated Fahad.



Hybrid Workplace

The mixed workplace is here to stay, and HR professionals should adjust accordingly. Even though the hybrid setup was initially implemented in 2021 as a safety net to protect people, by 2022 it had become the standard. Rethinking performance reviews and providing more leeway for deskless employees in order to reduce the impact of proximity bias in the workplace.

In order to limit the spread of the highly contagious virus, video conferencing apps like Zoom, Microsoft Teams, and FaceTime have largely replaced in-person meetings since the advent of remote work and their broad acceptance.

According to Sam Tayan, director of Zoom's Middle East and North Africa division, "video communications have helped maintain a sense of normalcy and continuity in life's important duties" throughout the pandemic. Tayan was speaking to Arab News.

More than two years later, the shift from constant face-to-face contact to intermittent remote interaction is seemingly irreversible, with people in all walks of life increasingly reliant on various forms of electronic communication.

Ali Rao, CEO of Dubai-based Elixir Establishments, told Media that the demand for serviced workspaces is expected to increase in the Kingdom in the future years.

Over the next five years, Rao predicts that the market for flexible office space in Saudi Arabia will expand at a CAGR of more than 6%.

As a result of the global pandemic, foreign businesses are flocking to Dubai, the economic hub of the Gulf, driving up demand for office space to levels not seen in five years. The first quarter of 2022 saw the delivery of office units totaling 480,000 square feet, increasing the city's supply to 107 million square feet, as reported by 6Wresearch.

Remote Jobs and Talent Pooling

Permanent remote work positions pose a serious threat to the status quo. Companies that are prepared to pay recruitment agencies large sums of money in order to have their applications for foreign jobs screened might as well use that money to find and train employees who are capable of working effectively across geographic, cultural, and organisational boundaries.

Young people in the Middle East are adapting social networks like Facebook and Twitter to meet their employment requirements, joining them alongside more established professional social networks like LinkedIn and Bayt.com. With the help of online communities, businesses can find and recruit qualified candidates in their area without having to spend a fortune on relocating them.

In countries such as Tunisia, Algeria, Egypt, and even Morocco, where the economy is already struggling, the number of young people who are literate and trained to work in the internet sector has grown faster than the country's ability to absorb them.



The Gulf Cooperation Council (GCC) economies, which have long encouraged workers to relocate from other Arab countries in order to expand their service industries, can now more effectively manage this migration flux while still fulfilling their aid commitment to other developing economies in the region by assisting in the integration and training of the local workforce from these countries thanks to easy access to the internet. The flexibility of working remotely, combined with the ability to reinvest earnings from one market into another, makes remote work the ideal way to combine professional education with financial independence.

Diversity, equity, and inclusion

The region's extensive cultural legacy is a major strength. Since many countries are eager to have skilled workers from other countries join their workforce, we have a great opportunity to benefit from the richness of cultural variety. Companies are making greater strides to promote female equality. Policies and practices that make it easier for women to join, advance in, and return to the workforce are examples of this.

Companies in the Middle East, both foreign and domestic, are progressively incorporating policies that promote gender equality into their selection and advancement procedures. Training to combat unconscious prejudice is also being introduced. Even more encouraging is the fact that an increasing number of businesses are investing resources into long-term strategy. The current push isn't just about filling positions, but also about spending in the training and advancement of women in order to create more inclusive pipelines for the future.

"It is encouraging to see that many boards are placing female representation high on the agenda and taking steps to foster women in their workforce as part of their commitment to diversity, equality, and inclusion. This trend is likely to persist as more and more businesses realise the benefits of incorporating diverse perspectives into collaborative decision-making," Maliha Jilani, member of the global social impact practice and partner at Heidrick & Struggles (Dubai).

"Creating opportunities for women to advance their careers and assume leadership roles is a problem that needs to be solved on a worldwide and regional scale. Although there is a sizable pool of qualified women from which to choose, their representation dwindles dramatically at higher levels. So, we need to figure out how to encourage and support women to remain in the employment and advance in their chosen fields," she added further.

Here's where mentoring programmes come in handy, by connecting aspiring female leaders with successful role models they can look up to and emulate. Promising female abilities will not only receive mentoring, but also receive financial support.

Having someone to speak up for their interests and lobby on their behalf. The combination of mentoring, sponsorship, and female role models is crucial to increasing the number of women in leadership positions and accelerating their advancement.

THE ADAPTABLE WORKPLACE - THE WHY AND HOW

 $oxed{T}$ he global management consulting firm, Kearney, found that companies in the Middle East with a diverse group of leaders saw a sizable increase in revenues from innovation.

In addition, the millennial and Next Generation workers who will be instrumental in the company's future success value working for companies that actively promote adaptability, flexibility and purposeful contribution regardless of the role in organizational hierarchy.

Elaborating on the topic, in an exclusive interview with Thirty To Net Zero, Maria Nova, AQ Practitioner & Coach, and Managing Director of the AQ institute in the Middle East said, "From an adaptability standpoint, we need to hire people not only for their skills and past contributions, but more importantly, we should consider their character and abilities to adapt. According to a study by McKinsey & Company, 40% of the jobs that exist today will not exist in 10 years' time. What does this tell employers? That we cannot rely on traditional measurements and practices that served us in the past. We need to adapt and change. This applies to individuals, teams, organizations, and society on a larger scale."

COVID Changes The Rules

Remote working has unlocked new ways of integrating life and work and has made an impact on traditionally underrepresented and underserved workplace communities. Since the start of the pandemic and the rise of widespread remote work, we've seen increased labour participation for workers with disabilities in the U.S., rising to 38% in September 2022, according to the Bureau of Labor Statistics. Distributed, work-from-home and work-from-anywhere policies have also allowed many workers who had previously experienced bias and high barriers to entry into the workplace to access new opportunities. To continue this momentum and ensure the workplace is accessible to all, flexible remote work must remain foundational to how we view and build our workplaces.

As we emerge from the pandemic, it's clear that hybrid working as part of typical office work culture is here to stay. Office work companies across the globe have implemented flexible working, and while leaders may be considering the ideal balance of time split between the office and working from home, most continue to offer work-from-home flexibility. As we look to the future, companies and employees alike are concerned about what hybrid working means for them.

Elaborating on the subject Maria said, "The overall perception towards work has changed drastically. We find that the biggest challenge today is that a lot of employees prefer to operate in a hybrid or remote setup. It's pretty hard to convince them to come to the office daily, specifically, if let's say they are introverts or/and their work environment and organizational culture is not very welcoming and supportive. However, hybrid and remote models are not very welcomed by companies with the traditional mindset, while it could definitely add benefits to the overall productivity with the right balanced proportion and knowledge of your team's requirements (professional. emotional. psychological, and physical).

"In terms of efficiency and performance in an on-site versus WFH environment, results depend on the work environment as well as the employee's personality. If you put them all under the same umbrella, you can't expect the same results because people perform differently within certain circumstances or within certain environments.

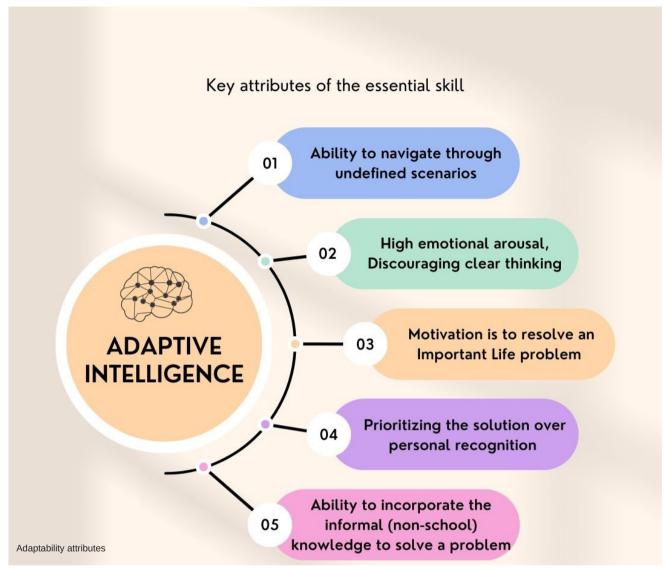
One of the most common questions is WHY so many leaders and companies really struggle to adapt? And this is due to our accumulated patterns. The entire architecture of how we get to work, how we are taught in school, how the paradigms were shaped and what success is defined as, all the reward systems and architecture promotions, all built for stability and continuity and consistency.

And this is no longer the case, which leads to the fear. The fear of the unknown. Leadership position power does not help much any more and even creates more pressure on the leader. We have no benchmark for a hybrid mode of work which makes it hard to validate if I'm as a leader, do things right and make the right decision of letting my team work from home. Plus, I have to prove to HR or the CEO why I'm allowing this while other departments work from the office. To add to that. most employees who prefer WFH feel more empowered, energized and accomplished working remotely. "Why do leaders insist on a return to the office? I believe a fundamental reason is their responsibility as a leader. The success or failure of the company is ultimately the leader's responsibility, and collaboration is essential. The CEO or Senior Manager is not prepared to take the risk of physical separation with his team. Being together in person gives more comfort and belief that we will succeed. On the other hand, control-obsessed personalities are also a common reason for forced return", added Maria.

Fostering Inclusive And Adaptable Workplaces

According to Forbes, to build a fairer future of
work, accessibility and flexibility must remain at
the heart of hiring and employee experience.





But, as many leaders rush to return to the office, we cannot ignore the fact that remote work is still the biggest opportunity to create inclusive and accessible workplaces of the future.

Further expanding on the topic, Maria said, "Well, I'm afraid there is no magic formula for creating an Adaptable workplace. This is a constant ongoing process which could be assessed, analyzed and improved. If we break it down into two main components, there would be a strategic element and operational."

"From a strategic standpoint, it would be a visionary approach from the ownership or top management side, which will define how adaptable the culture could be. And that vision is cascaded downwards. Thus we are led to an adaptable environment that is nurtured internally."

"While examining the operational side, certain technical details can provide us with more clarity on our current position, performance, and areas for improvement. Here the AQ assessment comes into play, where we can evaluate three main dimensions (on individual/team/organizational levels) and also provide AI powered analytics with Change Readiness index and Reskill index," she said.

The Story Behind AQ

"Many of us are familiar with the term IQ, which defines our general intelligence. However, it no longer serves us in fast-changing environments with lots of uncertainty. The word "adaptability" has gained a lot of traction in recent years, especially during the lockdown days. In its 2021 survey, LinkedIn identified adaptability as the most desired skill based on their learning platform performance. This topic has been researched within academia as well as business, and a new term, AQ (Adaptability Quotient), was introduced in 2019. The main difference of AQ is its complex approach and absence of predefined answers to problems. AQ addresses multi-dimensional scenarios with long-term circumstances affecting not only individuals or organizations, but the environment as well ", explained Maria.

As a certified AQ practitioner and coach, she also leads the AQ Institute in the Middle East helping organizations to navigate and thrive through change.

"Our strategic partner AQai, the British-based pioneer in the adaptability domain, has empowered us with an advanced analytical tool that we utilize to assess individuals and teams from an adaptability perspective. This enables us to gain insights into abilities, character, and environment across 17 parameters, providing a lot of actionable data points and tendencies on a personal and corporate level. Apart from assessment and consulting services, we also conduct research to identify opportunities for human capital development in the region. Some areas of our research include Arab Women Leadership, Adaptability factors in Emirati culture, and Youth Adaptability Program."

The AQ Institute is a unified global platform for sharing resources, extending knowledge, and engaging with domain experts in the area of Adaptive Intelligence and Human Development.

Regional Challenges To Promoting Adaptability & Change

'I would say the biggest challenge will be the lack of self-awareness and self-reflection on an individual and organizational basis,' stated our guest.

"For example, group awareness sessions or group reflection sessions are quite popular in the US, especially within a startup environment. I am absolutely sure that it could be a game changer for our region where we see multicultural environments. Communication is the key which helps to open any door.

Another important thing to consider is fear - the fundamental, primitive human emotion with a high impact on our emotional state and behavior. The fear of change and fear of the unknown can present significant challenges to adapting in a work environment.

Employees may resist changes in policies or procedures because they are comfortable with the status quo and uncertain about what the changes will mean for them. This can lead to resistance, reduced productivity, and negative impacts, including sabotage. The fear of the future and uncertainty can raise stress and anxiety, which negatively affects the workplace environment. It is important to detect these fears at an early stage to provide preventive measures and support to those who need it.

This is what we look for during our AQ assessment within the Environment dimension, which measures company support, emotional health, team support, work environment, and work stress levels.

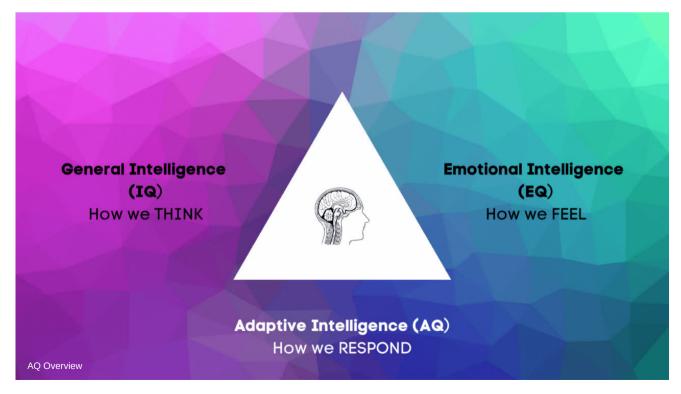
Employers should acknowledge the significance of emotional literacy and well-being and ensure that they are included in their operations and policies.

Empowering Women Can Help The Region

According to the World Bank, In recent years, the GCC economies implemented ambitious reforms to enhance women's economic inclusion. They have improved women's access to education, health care and employment, and have encouraged women to participate in political life.

Speaking further on this topic, Maria admitted that by empowering women in business, we can foster innovation, creativity, and diversity, leading to better business outcomes and a more equitable society. There are some recent studies which show that women generally have a higher adaptability index. The ratio is between 21 to 34%, depending on certain factors, such as age, background, experience and context. Also, women have higher empathy levels and higher mental flexibility. Empowering women in business or politics also has positive ripple effects in society, such as improving gender equality and reducing poverty and inequality.

However, in the Middle East, a challenge that I have observed is a lack of self-confidence and the strong influence of inherited behavioral patterns dictated by culture. The "working woman" image was not well-branded in this region. Nevertheless, I believe that things are changing, particularly within the UAE where this change is happening rapidly. We are already witnessing many women taking over leadership roles in business and government, as well as successful female entrepreneurs such as Huda Kattan, who is well-known for her brand Huda Beauty, Mona Ataya and Leena Khalil from Mumzworld, Joy Ajlouny, co-founder of Fetchr, and many others.



"I firmly believe that if a woman has the inner desire and drive to pursue her goals or vision, she can achieve them with the right support (or even without). When she finds the right encouraging environment to pursue her dreams, there will be nothing to stop her and she would be able to make a bigger impact in less time," stated Maria

"In fact, many initiatives and special programs have been launched by government, semi-government, and enterprise organizations to support women's empowerment in the region. One of the greatest examples is NAMA (Women Advancement Establishment in Sharjah) and Badiri Academy (https://www.badiriacademy.org/) or Visa She's Next Grant Program (https://ae.visamiddleeast.com/en_AE/run-your-business/she-is-next-campaign.html). I'm sure that is just a beginning. Recently I came across NAMA Women's Advancement program launched by Sharjah Government, for example, to help women especially housewives to step out of their comfort zone and pursue new adventures in their life," Maria added further.



All Photos Are Provided By Maria Zyryanova

PROMOTING FEMALE EQUALITY IN THE ARAB WORLD'S WORKFORCE THROUGH DIVERSITY

Movements like #MeToo and Time's Up have shed light on the long-standing power disparities between the sexes that have come to the fore in recent years. The widespread spread of COVID-19 has drawn even more attention to these discrepancies. For instance, because of the persistence of gender norms, many women believe they must shoulder the bulk of housework and infant care. As a consequence, many people have had trouble keeping their personal and professional lives separate during COVID-19 lockdowns.

This was one of the topics discussed at a recent event titled "How Women Rise: Influential Women in Middle East Finance," which brought together prominent women from the top financial organisations in the Gulf. This conversation was made possible by a well-known media outlet as part of the G.C.C.'s A Fair Share programme, which promotes gender parity in the banking sector and encourages women to advance their careers.

The epidemic has completely rearranged the world's female population. "Many working mothers have been hit with the double whammy of keeping down a career and dealing with childcare and education," said panel moderator Zainab Fattah, a Middle East correspondent from region's leading media house . "While many of us expect that the pandemic will be short-lived, its long-term repercussions may be severe - on women's advancement within various industries and on their ability to make a living."

Continuing her presentation, Fattah highlighted key takeaways from a recent study conducted by management consulting firm McKinsey, which found that during COVID-19, working women were three times more likely than working dads to be responsible for the majority of housework. The research also found that as a result of the increased pressures brought on by the pandemic, one-fourth of women are contemplating abandoning their careers entirely or significantly reducing their career goals. Fattah rightly pointed out that these tendencies could thwart ongoing initiatives to improve female equality in the workplace. Female representation in positions of power is low overall and even lower in many Middle Eastern countries.



Helping Females Through the COVID-19

Women have been hit harder than males by the pandemic, but it's encouraging to know that some Middle Eastern businesses are working to help their female employees cope.

As Citi's Vice Chair of the Middle East and Chief Country Officer of Saudi Arabia, Carmen Haddad said on the panel, "at Citi, we are mindful of the challenges that women are facing during the pandemic," including caring for families, homeschooling children, and performing household chores. To enact change and consider leniency [policies] for women, "this is a chance for us."

Another panelist, Farah Foustok, CEO of Lazard Gulf Limited, stressed the need for empathy in the current climate. Now more than ever, compassion is needed. Lazard has recently implemented "mental health workshops" for its staff, and its leaders also "encourage mentoring and one-on-one engagement to really understand [each person's] problems," as she put it. "It's been a huge boon that workers can talk about their problems and concerns openly."

Parity between the sexes in the professional realm

Companies are working towards broader gender equity goals beyond COVID-19.

Even though "a lot of work needs to be done" in the Middle East, "we are seeing a basic shift in mindset towards female empowerment and female inclusion," as Haddad put it.

Some businesses are instituting policies that guarantee equitable opportunities for men and women at every level of the organisation.

Equal pay, similar promotion, and equal representation at all levels are major priorities for Citi, according to Haddad. Ten of the nineteen employees promoted to director level roles in the Middle East and Africa last year were women. We set a target of having 50% female applicants in our doctoral programme.

Furthermore, Bloomberg is committed to empowering women in the workplace through a variety of internal and exterior programmes and activities. The Bloomberg Gender-Equality Index (GEI) is one such index because it measures the success of public businesses in this area. The goal of the Index is to create a strong economic argument for gender parity. As part of its A Fair Share programme, the business is also planning to host additional knowledge-sharing sessions across the Gulf in the coming months.

An issue that must be fixed does not exist in women. Instead, "they're the answers to the issues confronting our companies right now," as Foustok put it. The bottom line will benefit greatly from hiring and promoting qualified women, as will the company's reputation.

To achieve success, one must look inward

Although these policies and procedures are crucial, women must also take responsibility for their own advancement in the workplace. Having faith in oneself is the first step.



The silence of women is unacceptable. One of the panelists, Wafa Ahmad Alqatami, a member of the Board of Directors at the Kuwait Chamber of Commerce, advised the audience to "battle for your right" if they aspired to take on more responsibility or believed they deserved a higher position.

Haddad agreed with her and emphasised the value of forging one's own professional route. Instead of counting on others to advance your job for you, she suggested taking charge of it yourself. "Don't be hesitant to ask questions or raise your hand if you notice an issue. Say "yes" to everything, even if it means stepping outside your comfort zone. Women shouldn't feel they have to put their careers first at the expense of everything else.

"As the day comes to a close, take stock of how happy you feel. Women put in long hours, but "we all need equilibrium as human beings," said Haddad.

At the end of the day, it's crucial that women establish their own standards for success in the workplace and beyond.

Customs, Cargo and Women: A talk for her

In order to close gender equality gaps in the MENA area, CCP introduced the initiative "Customs, Cargo and Women: A talk for her" in July 2021. Networking events, a regional pool of CCP cofacilitators, and cross-regional study tours are just some of the activities that have been put into motion by the initiative since its inception to empower CCP women officers in the area. The CCP MENA team has recently shifted focus to a new strategy to address gender inequality in the area, one that aims to alter organisational mindsets and structures.

In order to achieve this objective, the CCP MENA team hosted a three-day event in September 2022, inviting key decision-makers from Human Resources and other management functions within law enforcement agencies across government structures in Iraq, Jordan, Lebanon, Morocco, and Tunisia. This Beirut-based programme encouraged participants to actively participate in discussions about how to integrate gender equality into the hiring, advancement, and retention of staff.

Participants were educated on unconscious bias and gender mainstreaming in the workplace with the help of a team of gender specialists, coaches, and human resources professionals based out of the UNODC's Vienna headquarters. To share what is working well in their own governments and to discuss what other countries in the area are doing well, participants presented policies and procedures they have in place during the workshop.

The CCP MENA team is committed to empowering CCP women officers in the region through a personalised approach, such as by providing opportunities for professional growth and training. However, they are also aware that change must come from within. Therefore, the Programme will keep working to reduce gender inequality in the region by educating influential people in member nations about the importance of implementing gender-sensitive policies, programmes, and structures in the workplace.



FIELDCORE'S CAROLINE WERUNGA: "COVID-19 HAS GIVEN BIRTH TO NEW WORK CULTURE"

In the Middle East, inclusive and diverse practices are developing. Human resource managers in this emerging sector are receptive to new ideas that can help them challenge the status quo in the field. According to UAE's Chartered Institute of Personnel and Development, age and racial discrimination are also issues for UAE companies. Therefore, it is imperative that DE&I policies in the area take into account the demographics of their workforce in terms of age, gender, and ethnicity. Kearney, a prestigious global management consulting firm, found that companies in the Middle East with a diverse group of leaders saw a sizable increase in revenues from innovation.

In addition, the millennial and Next Generation workers who will be instrumental in the company's future success value working for companies that actively promote diversity and inclusion.

Commenting on these developments, stated, Caroline Werunga, Regional HR director, FieldCore, "DEI (Diversity Equity and Inclusion) is how in our organization, we create spaces where everyone, irrespective of their background, culture, gender, experience or orientation, can thrive and have a sense of belonging. This is not something tangible but rather a culture (collective behaviors and values) that we are intentional about shaping. We drive this in different ways including being deliberate and unequivocal about the behaviors and values that we expect all our team members to embrace. It ultimately shows in how we treat each other."

COVID-19 The Game Changer

The rapid evolution of society and technology in the post-covid era has compelled the globe to reevaluate its assumptions about the nature of cultural influence and production. For instance, awards ceremonies have shifted from face-to-face gatherings at which actual prizes are presented to online platforms where the same acknowledgment is still bestowed. This means that the tasks performed by the world's workforce have remained mostly unchanged, while methods of execution have evolved. As the globe continues to embrace the multi-cultural workplace, the how will change to better accommodate employees of various backgrounds.

Stretching the subject further, Caroline commented, "Agree that we do want to drive a consistent culture across the globe when it comes to certain core important aspects e.g. performance driven culture, DEI, Compliance, recognition, etc. However, our organization culture has to be flexible to accommodate country or site nuances that do impact the organization culture.



"As FieldCore, we have remained very flexible when it came to remote work culture. In some parts of the world, where the country practice was a return to work predominantly, this has tended to happen naturally. In other parts, remote working has remained predominant, so we have remained flexible with this as well.

"I think one of the things that the pandemic taught us is adaptability and flexibility. This means we have continued to evolve how we drive culture for the organization whether people are physically at an office or site or working remotely. We continue to create employee experiences that reflect who we are as FieldCore – a company that embraces Diversity, Equity and Inclusion."

Women Have Become The Key Workforce

The role of women has always been crucial. The need for such an equilibrium in the workplace is becoming increasingly apparent. Research conducted mostly in the West (the United States and Europe) has shown that workplaces that actively promote diversity at all levels see increases in both productivity and employee engagement.

Whether one identifies as a woman or not, one needs to care about the same things that women care about. Equal treatment, respect, acceptance, and a feeling of belonging are all things that women strive for. All employees share a common interest in these areas of the workplace.

"What I see as unique to women is how we ensure that the workplace accommodates unique needs that women may have e.g. ensuring our Personal Protective Equipment (PPE) accommodate women's needs in terms of how they are designed; ensuring we have basic facilities for women at the workplace e.g. appropriate sanitary facilities, lactation facilities as appropriate," said Caroline.

"I am proud of many things that FieldCore and the broader General Electric (GE) organization continue to do in the region. What stands out the most for me is the culture. The culture of DEI and Safety is real at FieldCore. There is zero tolerance for discrimination of any kind, and we do practice an open reporting culture that allows anyone to raise their hand. At FieldCore, inclusion is more than just compliance.... It's the culture. We also have strong messaging about Safety and ensuring everyone goes home safe. We empower our employees to Stop Work if there are unsafe practices at any site," she added further.

Adopting The Region's Rich Culture

Profitability and output can both benefit from some variety. Therefore, businesses in the Middle East area should make the most of the region's rich cultural diversity in order to succeed in a market where a sizable minority of residents are not native English speakers.

Human resources experts have expressed their eagerness to make use of the region's linguistic and cultural diversity.

The region's local economy will languish if we don't promote open contact between people of different ethnic backgrounds.

"Middle East (and Africa) has some of the world's richest culturally diverse workforce. And is easy to tap into this diversity through attraction and retention strategies. We must be intentional about diversity in the workplace as this will not happen organically if left to individual hiring teams. As human beings, we tend to lean towards our comfort zones / what we know, hence will tend to hire people who are similar to ourselves e.g. educational background, work experience, gender, culture, etc. As an organization, we have to be intentional about how we craft and execute our hiring strategy to have diversity at the heart of it. So it's clear to all stakeholders what our aspiration is for diversity and more importantly, how to accomplish it. You have to create buy-in with stakeholders, which is our hiring teams right from HR to people leaders," opined Caroline.

She feels that still region needs to overcome five challenges (listed below) if it wants to promote diversity and inclusion at full throttle.

- 1. Unconscious bias
- 2. Lack of awareness about DEI
- 3. Stereotypes based on race, gender, culture, language, etc
- 4. Discrimination based on race, gender, culture, language, etc
- 5. Lack of top leadership buy-in to the importance of DEI

"First and foremost, fair employment practice policies must be at the heart of all hiring and employment practices. As FieldCore, we drive a spirit and letter approach to how we manage not only our hiring practices but every aspect related to the employment of people.

"This approach means that we not only follow the letter of the law but also embrace the spirit with which the law was written. It's not about taking advantage of grey areas in the law but rather about thinking about what the intent of the law is and ensuring equitable and fair practices. We are also very intentional whenever possible, in raising the bar to go above the minimum requirements to truly embrace a culture of DEI. We endeavour to not just do the bare minimum as this will not yield desired results in terms of how to differentiate ourselves as an employer of choice," informed Caroline

The region is also witnessing a great transformation as more and more regions have started showing a growing interest in gender diversity. Commenting on this development, Caroline elaborated, "These changes will not happen on their own as there is still a lot of bias towards women in general and particularly to women in leadership. Organizations have to articulate their "What", "Why", "How", "When" and "Where" – basically define a strategy on how to achieve more diversity, particularly at the leadership level. What is the investment they are willing to make to achieve this priority? This needs buy-in from senior leaders and buy-in across the organization."

Caroline is a self-described "home-body" who values time spent indoors with her loved ones above everything else. When the weather is nice, she also likes to take weekend road trips outside of town and do a little bit of hiking, and going to the movies is always a good time. She's making an effort to resume her reading habit, and things are looking up great so far.



All Photos Are Provided By Caroline Werunga

WHAT THE MIDDLE EAST CAN LEARN FROM AI-POWERED BIG DATA ANALYTICS

Decision-making in all levels of society is being profoundly altered by big data analytics driven by artificial intelligence (AI). Massive data processing, analysis, and insight generation have the potential to significantly improve many fields and uses. Along with a regulatory sandpit climate, the Middle East's rapid adoption of technology and contemporary infrastructure has allowed it to surpass developed markets, positioning it to become a global hub for innovation.

The ability to quickly offer actionable insights to create precise forecasts is a major advantage of big data analytics, as is the ability to gather and synthesise large and diverse sets of data to enhance the decision-making process. Whether it's dealing with major economic headwinds or resolving crises and issues affecting the general public, this method helps businesses make better decisions and take appropriate action in reaction to changes in their ecosystem.

Thomas Pramotedham, CEO of Presight.ai, said, "One of the most significant benefits of big data analytics is the ability to gather and synthesise large and diverse sets of data to improve the decision-making process, allowing the rapid delivery of actionable insights to create precise forecasts."

The use of AI in healthcare is rapidly expanding around the world. Forecasting firm Frost & Sullivan expects it to hit US\$6.6 billion by the year's conclusion. Massive amounts of data produced by diverse devices that can be analysed and used to inform decisions are what make such expansion possible.

Medical experts in the Middle East testify to artificial intelligence's usefulness and widespread adoption in the field.

With the idea that technology should form the backbone of the American Hospital, we embarked on our digital transformation path a year ago. In order to create more sophisticated models, American Hospital Dubai's chief information officer, Ahmad Yahya, has collaborated with industry leaders such as Oracle and Microsoft.

Using the hospital's existing Cerner clinical database and modelling, the IT department at the hospital developed a new COVID diagnostics tool. The clinical staff at the hospital's critical care unit adapted and verified it to better identify patient risk factors and determine admissions.

Two additional diagnostic apps that rely on AI are designed to spot asthma sufferers and foretell which emergency patients will need to be admitted.

We are presently developing three different AI models; one, the COVID model, has been validated, and the other two are very close to being validated. At this year's Arab Health 2021 conference in Dubai, Yahyah revealed, "We are also working on coming live early next year with real-time monitoring of patients' sentiments, satisfaction, and (hospital) capacity," which can help allocate resources.

Experts in the medical field believe that artificial intelligence (AI) can serve as a "third opinion" for doctors by analysing the vast amounts of accessible historical medical records and advising them on the best course of treatment. Artificial intelligence programmes can examine all the medical data we have on a given illness and determine which treatments and drugs have the best track record of success across all of medicine.

Massive volumes of data are driving the growth of Al-based apps

The discipline of medicine, which is replete with data, places a premium on precision more than in most others. Algorithms' ability to draw correct and accurate inferences from data increases as more data is fed into them. On the other hand, Massimo Cannizzo, CEO of Gellify, a venture capital firm that in October launched a US\$50 million fund with management group Azimut to invest in companies providing healthcare and emerging technology in the Middle East, claims that the volume of health data generated by various types of technology in use today is growing. Health data can be generated by a number of common wearable devices, such as portable heart rate and blood pressure monitors and devices that can track your blood sugar levels in real time.



Artificial intelligence (AI)-based diagnostic systems will have access to even more data on the health of each individual patient as the price of already popular fitness bracelets drops and their functionality increases, allowing the doctor to more precisely and efficiently prescribe a treatment plan.

Cannizzo predicts that 25% of the adult population in the MENA (Middle East and North Africa) region will use a wearable device by 2022, demonstrating the rise of so-called augmented healthcare as evidenced by the growth statistics of the wearables market in this region.

Using Intelligence to treat illness and improve productivity

The ever-increasing sophistication of algorithms and artificial intelligence models—programs or collections of algorithms that employ a body of data to recognise trends and carry out tasks—is already being put to use in a variety of medical settings.

According to Kentaro Suzuki, general manager at medical equipment manufacturer Canon Medical, AI will not only help make clinical evaluations but also streamline operations and workflow. It can reduce MRI imaging times, for instance, Suzuki claims.

The present capability of the imaging equipment can be enhanced with the help of Al, according to Suzuki.

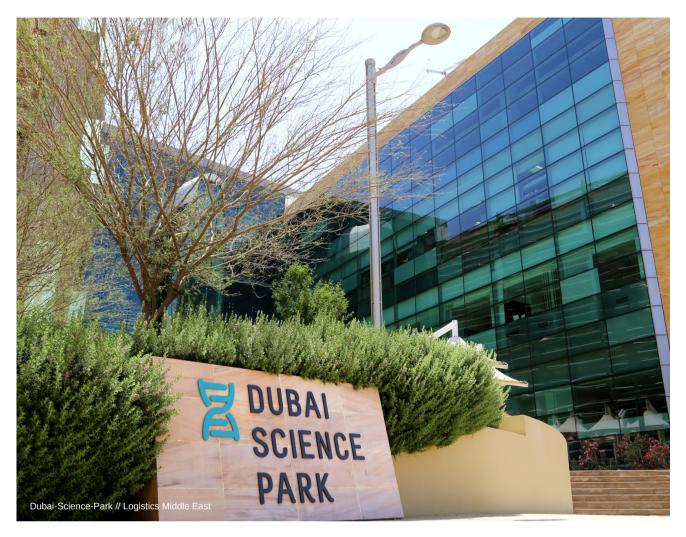
Computer vision and AI software can examine medical images and detect early signs of illness that a human doctor might miss. According to Suzuki, "it will never supplant humans" in terms of making direct diagnoses of patients. However, the "third opinion" that AI can provide is particularly useful in the case of oncological diseases, where early treatment can greatly improve the prognosis for a speedy recovery.

Application of AI to Genomic Research

The use of AI has the potential to revolutionise the field of genetics and advance genomics. Recent studies have demonstrated that an artificial neural network can be used to analyse massive amounts of genetic data, thereby exposing clusters and sequences of genes that are causally linked to various diseases.

Understanding genetic information at the most granular level is presently the key to deciding how to treat diseases because they are "encoded" in a person's genetic sequence.

As a result of the intricacy of genetic data, progress in genomics has been slow. However, practitioners now anticipate advances in genomic research due to Al's ability to classify and analyse a vast array of data in a short amount of time.



"I think we are all shifting towards more automated work flows and smart technologies, including in genomics by default because we generate large amount of data that is impossible to manually assess and make sense of," said Prof. Walid Mohammad Abuhammour, a clinical molecular geneticist, director of the genomics centre at Al Jalila Children's Specialty Hospital, and associate professor of genetics at Mohammed bin Rashid University.

Particularly, AI can contribute to progress in curing rare illnesses. According to Genomics England's head of data strategy, Joshua Symons, 80% of so-called rare illnesses are genomic, with 50% of them found in children.

To find novel drugs and improve people's lives on a national scale, "we want to embed the combination of AI and genomics into routine medical care," Symons said.

Symons argued that methods like these should be incorporated into standard clinical practice so that patients, who can now do things like test their own blood sugar levels for diabetes, have access to decision support tools that help them choose the best treatment options. He predicted that in the near future, people with cancer would be able to monitor their own treatment progress by drawing blood and having their ctDNA (circulating tumour DNA) analysed.

Increased worries about the safety of AI

However, as more and more businesses implement cutting-edge technologies like AI and robotics into healthcare delivery, issues of safety and patient protection have come to the fore.

"Many of our digital health businesses already employ Al. Companies that either make or use surgical machines are also present. Marwan Janahi, managing director of Dubai Science Park (DSP), which was established to promote the United Arab Emirates (UAE) as a leading location for R&D, noted that the number of such businesses is on the rise.

According to Janahi, the healthcare industry is always changing, and DSP is home to more than 400 businesses employing more than 4,000 people. Despite the growing significance of AI in the healthcare industry, he cautioned that practitioners take special care to protect patients' personal information.

Patient information can be protected in a number of different methods. Patient data must be stored in the UAE, a country with very strict data security laws, according to Janahi. This legislation governing information and communications technology was issued in January 2019.

While the patient should have legal title to their data, Janahi argued that some leeway is necessary so that information can be shared internationally when necessary to improve healthcare knowledge and to seek second views.

According to Yahyah of American Hospital, data protection in the healthcare industry should be approached from multiple angles. "When it comes to protecting data online, we take the standard precautions, like installing filters, that most companies take. But your employees are the weakest link, and [security] awareness is crucial to us," he said.

According to him, the hospital uses simulated assaults as a form of prevention by spreading information among employees.





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ADAPTABILITY IS A MUST IN THE BUSINESS SPHERE: PINTO

Globalization in the workplace has been a major trend over the past two years. Businesses adopted a new model known as the hybrid arrangement in which workers were not needed to report to the office every day.

In spite of the fact that many of these alterations are designed to ensure company continuity and improve the employees' work-life balance, the human resources department has a hard time keeping up with the pace of a sustainable and hybrid workforce.

Managers in charge of human resources have more on their desks than ever before, with disenchanted workers, higher turnover rates, rising demands for workplace flexibility, and so on. Globalization, institutional change, and shifting demographics have all had a significant impact on the Middle Eastern employment market. Furthermore, the significance of adopting modern human resource practices that prioritize employee happiness has been emphasized innumerable times. A dynamic, varied corporate environment that fosters productivity, creativity, and innovation is essential in the modern era for maximizing peak performance, keeping low employee turnover, and achieving long-term business objectives.

In an exclusive interview with Thirty To Net Zero Magazine, Arul Savio Pinto, Consultant, WellKom International stated, "The current VUCA (volatile, uncertain, complex, and ambiguous) environment requires us to be mentally and physically ready to handle whatever life tosses at you each morning because, as the saying goes, 'Change is inevitable in life.'

"Having a wide range of skills at our disposal will help us adjust to new circumstances. Those who are able to change with the times will do well in any field. It's possible that adaptability isn't a skill we're born with, and that learning to be flexible won't be simple for most of us. In order to better ride the waves of change, we need to readjust our standards."

"Nowadays, flexibility is a necessity in the corporate world. The capacity to change and adapt allows you to take in new information, think critically, and act independently of the norm. Being flexible leads to greater contentment and joy in life. The ability to adapt increases one's resilience, allowing them to better weather any type of disruption."

"It is more important than ever to find novel approaches to encouraging high levels of contribution and involvement in the modern workplace, where working remotely and collaborating online to achieve key goals is the order of the day.

"Without formal authority, "co-elevation" is a crucial foundational behavior that enables us to lead, connect, and elevate ourselves and others successfully.

"Coaching in the workplace is a form of expert assistance that places an emphasis on the client's desired outcomes. It's built on both sides doing what the other needs done. Coaching in the workplace helps the coachee reach his or her full potential. The guide acts as a catalyst for the client's future, self-directed growth and learning. When leaders receive coaching, it helps them face the uncertainty."

Workplace environments are dynamic due to market factors and employee turnover. Through coaching, a leader can draw out the skills and expertise of their team. This allows managers to concentrate on the big picture, avoid getting bogged down in the details, and give their staff members a fair shot at demonstrating their abilities.

"Fostering and contributing to Sustainable Development Goals (SDGs) is easier with a flexible workforce that works in a coelevated setting and receives the constant coaching and mentoring needed.

Covid-19 Has Redefined the New Work Culture

The speed and magnitude of the changes brought on by the Covid-19 epidemic in the workplace are unprecedented. People have realized they can get most of their work done without physically going to a workplace. However, leaders must decide which alterations to the culture they want to keep and which ones they need to counteract as they readjust to post-pandemic operations and get ready for the rebound. This rate of shift is problematic.

"At the outset of a new task or endeavor, leaders should provide more context and direction. They may need to check in more frequently to figure out how best to help their employees progress. Leaders, above all else, must earn followers' confidence.

"They need to trust their employees to make decisions and take charge of their work in ways that make the most sense to them. The moment for self-determination has come. Similarly, there may be costs to your company's culture and mindset that you don't realize when you switch to a remote work model.

"Many individuals have suffered the silent harm of isolation due to the lockdown. As a response, leaders can interact with their employees and use collaborative technologies to stay in touch with them. 'Mental health awareness' was a catchphrase before the pandemic. Currently, it's a requirement. Leaders also have a responsibility to emphasize the value of order and structure.

"Completely independent workers may put in more hours than they did at the workplace, but they produce less quality work overtime. They are unable to reorient themselves or return to the job at hand. The lines between job and free time blur. Leaders should demonstrate that there is a balance between work and leisure by taking time off themselves.

"Attempts to alter a culture's norms can be frustrating but ultimately worthwhile. It can feel sudden and overwhelming when it is forced upon you, as it has been upon all of us in recent months. But with time and thought, business executives can glean many benefits from the challenges we've faced in recent months." said Pinto.

Diversity, Equity, And Inclusion

While diversity and inclusion are trending subjects, it is more of a business necessity than a Human Resources matrix.

Tokenism, the practice of hiring only one or two people from a particular minority group in order to appear diverse has become quite rampant. The culture shapers in many organizations try to avoid the harder work of actually creating a diverse and inclusive culture. However, it is essential to strive for diversity, equality, and inclusion in the workplace.





"Effective DEI efforts in the workplace require HR Leaders to take the lead. This can be done by, among other things, creating a standardized interview process, focusing on 'culture add' rather than 'culture fit', committing to developing high-potential diverse candidates, creating programs that provide access to development, identifying C-suite executive sponsors, reviewing all aspects of HR that impact diversity, encouraging input from all employees, securing leadership buy-in, and beginning to track results," opined Pinto.

Inclusive And Adaptable Workplace Need of The Hour

Today's business leaders generally concur that fostering an environment where all employees are treated with respect and dignity is crucial to the success of the company as a whole. However, this objective is trickier to accomplish than it may seem at first.

Securing buy-in and support from across the organization is crucial to designing and delivering on the promise of an inclusive workplace. Organizational success requires active measures, such as internal communications reframe and management style adjustments, that foster an environment where all employees feel valued and respected.

These "daunting tasks" become a chance for growth and engagement when the benefits of an inclusive workplace become tangible. Leaders should routinely solicit input from team members and disseminate the findings in order to provide an environment where everyone can feel comfortable. When executives show a genuine willingness to hear both positive and constructive criticism, they pave the way for the business to make significant advancements.

In order to make their teams feel valued, leaders should inquire as to what is required of them. A key factor in making people feel heard and valued is taking the initiative to recognize how they are feeling and then taking action to fix identified issues. In a healthy workplace, questions are encouraged from all workers at all levels. So that employees feel safe expressing their unique points of view, businesses can provide education and training on encouraging and welcoming constructive disagreement.

Building genuine relationships in the workplace is crucial for fostering a welcoming environment for all workers. A powerful predictor of productivity and longevity is an employee's feeling of belonging, which can be boosted by encouraging the development of meaningful relationships at work. Leaders need to demonstrate a genuine interest in this work by launching organizations, funding existing ones, and participating in them themselves.

Leadership must always lead by example if it wants followers. Organizational diversity and inclusion can be greatly aided by the establishment of employee resource groups (ERGs). Commenting further on the role of ERGs, Pinto stated, "For the purpose of networking and advocacy for both the company and the industry as a whole, ERGs bring together employees who share common backgrounds and experiences.

Finally, acknowledgement has been shown to have a significant impact on creating an open workplace. "Employees who are acknowledged on a weekly basis are more than twice as likely to report a high level of social acceptance. According to Gallup, meaningful praise is sincere, genuine, and tailored to the recipient. In today's competitive business environment, it is essential to take deliberate action to mobilize the appropriate assets in order to establish an inclusive mindset. "Employees are looking for workplaces that treat everyone with respect and dignity. Therefore, businesses can guarantee the success of all their employees by fostering an open work

Women Are Turning the Tables

environment." he said.

The trend towards women in leadership roles appears to be on the rise, with CEO positions being filled by women at prominent companies like IBM, General Motors, and Mondelz International.

There are currently more women serving as CEOs of Fortune 500 companies than at any time in the list's 63-year existence. There are benefits unique to having women in the workforce. Diversity in the workplace, including but not limited to gender, culture, age, and ethnicity, has been shown to encourage original thinking. There will always be differences in how men and women handle business due to their unique life experiences and perspectives. Creativity and innovative ideas are fostered through challenge and collaboration between individuals with different perspectives.

Women naturally possess the "soft skills" required for successful company leadership. CEOs often say that "soft skills" are more important than technical expertise when it comes to hiring new employees and new data from McKinsey shows that companies with a diverse workforce are 15% more likely to achieve financial results that are significantly better than the industry average.

Most C-suite members believe that the best candidate, regardless of gender, should be hired, but anecdotes about women who were hired more often after changing their names to something less gendered show that unconscious prejudice is still a problem.

Commenting further on the situation, Pinto added, "Women who are in or aspire to be in leadership positions report feeling under intense scrutiny. Women, in contrast to males, are socialized to avoid being "bossy" from a young age.

"Because of ingrained bias, the same traits—such as initiative, passion, and leadership—may be given distinct meanings by men and women in the workplace. When compared to males, women fare worse when bargaining for pay raises. Many people believe that women contribute to the wage gap by being unwilling to negotiate for higher compensation for themselves.

"It's widely believed that males have more confidence than women when it comes to negotiating for higher salaries and leadership positions. The "imposter syndrome" causes even the most accomplished women to doubt their own value and competence. The first step towards eliminating the gender pay gap is for women to recognize their worth and negotiate for a salary that represents it. Increasing pay transparency is another effective strategy for achieving this goal."

Regional Roadblocks

The Middle East benefits greatly from a deep cultural legacy. The region is lucky to benefit from the richness of perspectives and backgrounds represented among our team members. More and more businesses, both multinational and domestic, are instituting policies that promote female parity in the workplace.

As more and more businesses realize the benefits of a more diverse workforce, this trend is likely to persist. Creating opportunities for women to advance and assume leadership roles is a problem that exists not just in our area, but across the world. Despite a sizable pool of qualified women waiting to be discovered, the number of women in leadership roles continues to decline sharply.

Company-led efforts and government requirements for the Middle East to truly achieve diversity have helped improve gender diversity over the years, but more needs to be done.

Technology is something that Arul Savio Pinto is very interested in, and he makes it a point to stay current on developments especially the area of Human Resources. Moreover, he enjoys visiting different countries and trying their local delicacies.

NEW METHODS FOR PROMOTING DIVERSITY AND EQUALITY IN THE MIDDLE EAST

Practices regarding diversity and inclusion are evolving in the Middle East. Human resource managers in this nascent market are open to novel approaches that can help them shake up the region's entrenched traditions. The Chartered Institute of Personnel and Development in the United Arab Emirates reports that age and racial discrimination are also problems for UAE businesses. As such, diversity, equity and inclusion (DE&I) policies in the region should prioritise addressing the age, gender, and ethnicity of their workforce. According to Kearney, a prominent global management consulting company, businesses in the Middle East with a diverse set of leaders saw a significant increase in revenues from innovation.

The incoming millennial and Next Gen workforces, who will be the driving force behind the organization's future success, are also highly concerned with diversity and inclusion, and they prefer to work for businesses that are actively fostering these values.

Combating DE&I issues related to age, gender, and ethnicity of employees is crucial. So, tell me, how would I begin doing DE&I in this area? What effective methods of DE&I could I carry with me to this area? And how might these customs be adapted to work better in this area?

Proven DE&I Practices

Change in the MENA area can only be prompted by tried and true methods. The world's top companies have faced DE&I challenges, and their experiences have yielded methods that can aid other businesses.

Included in these collective initiatives is "engaging, supporting, and educating leaders on how to use the DEI agenda to create change."

Professor of sociology at Harvard University David Pedulla says more instruction is required. Change needs to come from the top down, so include administrators early on. Leaders need to be very clear on why implementing the selected DE&I plan is a catalyst for change. Authorities should take care to avoid giving the impression that they are merely performing the role of an ally. That's why they need accurate information about effective DE&I methods.

Adopting the region's robust cultural framework

Variety boosts productivity and revenue. As a result, the Middle East region's cultural diversity should be utilised to its fullest potential so that companies can continue to thrive in a market where foreigners make up a sizable portion of the population.

Human resources professionals have talked about how excited they are to take advantage of the region's rich diversity of faiths, languages, and cultures.

If we don't encourage open communication between people of various cultural backgrounds, our local economy will stagnate because everyone will always see eye to eye.

Leadership Potential in Ladies

More and more regional businesses are realising that female executives can boost productivity. Many of our present leaders felt that women are making progress despite still being vastly underrepresented in C-suites and corporate boards across the states in our area.

There appears to be a rising interest in gender variety among regional businesses. But we still need to pay even closer attention to the changing social attitudes towards women in leadership roles in the area. There has been significant progress in Saudi Arabia, according to the HR expert of a major technology company, because male employees have been trained on how to engage more effectively with female peers.

Increasing Popularity of Non-Conventional Nominees

It was discussed how important it is for a company's diversity strategy to look for candidates who don't have the typical qualifications. This is especially important because of the severe lack of technological and digital pioneers in the area. The traditional four-year technology degree is becoming unnecessary for entry into a growing number of today's IT positions.

High school grads who take advantage of accelerated technical training programmes, online courses, coding boot camps, and community college programmes can acquire the knowledge and abilities necessary to succeed in a wide variety of entry- and mid-level IT jobs, according to the head of a major pharmaceutical organisation.

Tackling Compensation Disparity

Foreigners to the Middle East have expressed unease over the apparent wage gap between nationalities. Some businesses have taken proactive measures to address this issue by publishing pay rates for all job classifications on the company website for all employees to see. This aids in making sure that individuals are compensated solely on the basis of their abilities and merit, regardless of their cultural background.

Permanent Employment

The significance of welcoming both younger and older team members in the region was emphasised by one compensation and benefits expert who noted that we tend to think of diversity in terms of gender and ethnicity.

Reverse mentoring is becoming increasingly popular as a means of reaching out to and inspiring high school and college students, especially in the STEM technology fields. There was widespread agreement that, in this period of longer life expectancies and later retirements, we should make an extra effort to welcome and include our senior colleagues.

Banishing the Bias

Unconscious bias training is being provided to all employees at many of the businesses represented, and new artificial intelligence screening tools are being implemented to help companies ignore applicants' demographics when reviewing their resumes.

While the Middle East has made great strides towards greater variety and inclusion in recent years, it is essential that these gains be maintained. HR managers in the Middle East can boost their capacity for innovation in this crucial area by maintaining an open mind and an interest in the customs of other countries.

Use DE&I conversations to embed a common language and amplify core values

The importance of discussing DE&I cannot be overstated. However, this cannot be achieved without first possessing a foundational understanding of fundamental DE&I concepts. Pedulla maintains that a business should provide instruction on such crucial matters. They should involve at least the following:

- The meaning of DE&I
- · Addressing microaggressions, intersectionality, accessibility, neurodiversity and equal pay
- · Unconscious and implicit bias based on gender, name and beauty norms
- · Conformity, stereotyping, prejudice
- · Cultural awareness and belonging
- · The support of women and working mothers

All these aspects of DE&I vary from one area to another. Understanding the cultural sensitivities associated with these issues in the MENA area is crucial. Work with local partners who manage society on a daily basis, as opposed to relying on theories like Hofstede's cultural insights, was my prior recommendation in this regard. Anyone who is just entering the market would be foolish to take their advice on this matter.





Let people know what the company's stance is and isn't on various topics

Everyone in the company needs to know this so that nobody feels excluded. Clearly communicate to your people the reasoning behind your decision to back a particular set of arguments. Considering the price tag of limiting women's access to the labour market, empowering women in the workplace would be a great first step for the MENA area.

Although these tried and true DE&I strategies have shown positive results in other contexts, they won't be able to bring about lasting change in the MENA area overnight. Instead, addressing DE&I issues calls for extensive planning, the creation of new policies, and the provision of training. For this reason, it's important to recognise that crafting a powerful DE&I plan can appear challenging at first. But keep moving forward, keep studying, and keep making an effort, because it will pay off in the long run.



SARA PERVAIZ AMJAD SHARES BROADER PROSPECTIVE OF D&I

When it comes to approaching life with courage and curiosity, affinity-based mentorship can be invaluable. Seeing someone who is like me succeeding is incredibly meaningful, especially for those who come from marginalized groups that have been historically and systemically disadvantaged.

Anyone who feels they're doing something for the first time will be afraid, but if there is someone else who is like them, is a few steps ahead and looks back to say, "Come, it's not so bad," or "Let me help you," then the person will be able to challenge their fears and move forward. This can be crucial for women as we generally tend to be socialized to second-guess ourselves. Additionally, marginalized groups are often pitted against one another within patriarchal structures. There is a strong sense of zero-sum competition when it seems that fewer opportunities are available. You are encouraged to drag the other person back so you can move forward in their place when they lose out.

Furthering emphasizing on mentorship, Sara Parvaiz Amjad, Assistant Dean of Administration in Student Affairs at New York University Abu Dhabi stated, "Mentoring provides a unique chance to alter historically disadvantages outcomes. A mentor, especially one who belongs to a marginalized group, can feel safe in what they have accomplished and then create room for someone else from that group to overcome the same obstacles they encountered. In this way, affinity-based mentoring serves to both strengthen communities and increase access across all levels."

Next Gen Workforce

People are genuinely consuming a lot of content online, and there is a lot of popular social media content that the youth consume relating to identity, belonging, diversity, and inclusion. Gen Z tends to be values-driven in its consumer choices and bring values into discerning what they spend their time and money on.

Businesses aiming to appeal to a global market are shifting their marketing strategies to focus more on the company's values than the product itself. Compared to previous generations, today's youth is far more knowledgeable and prioritizes values above all else – these values tend to lean more towards liberal western understandings of global humanity. Consumers today care about issues of diversity, inclusion, equity, and justice, as well as mental health and well-being. We anticipate that these young people will enter the workforce and serve as agents of social change.

"However, it is crucial that we educate the younger generations on how to filter and select useful information from all that is out there. For a mentor, it is essential to also then be a content curator of sorts and guide younger people in the content they are consuming, situating it within the context different cultural backgrounds. Since there is so much information available, it's crucial to have some sort of direction and curation in content consumption," argued Amjad.

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Every environment needs D&I

In every setting, diversity and inclusion are crucial. Therefore, it is crucial to have a wide range of identities represented. The more diverse the team's members are, the more likely they are to come up with novel solutions to problems. At the same time, for diversity to be truly effective, it is essential to have affinity-based mentorship and intra-group community building.

But if you bring together people from diverse backgrounds, you will have a wealth of information and insight that no single person could ever provide by themselves. The ability to draw from a wide range of perspectives, expertise, and lived experiences is crucial. And that's where smarter answers can be found.





At the same time, just bringing a more diverse group to the table is not enough. To be able to draw from that wealth of information, it is essential that everyone feels like an equal contributor, and that power differentials that may exist within the group are acknowledged. For individuals from marginalized groups, affinity-based spaces can be helpful in creating more psychological safety needed to engage more fully in diverse intergroup spaces.

When you have people of different linguistic backgrounds and cultural identities, you have access to a wider range of ideas and insights and may reach a more varied consumer base as a result. Your team's ability to create products that appeal to a larger audience and address a broader range of problems is strengthened.

Women executives making in-roads

Having more women in positions of power is crucial. The way systems have been set up over the course of history, women have been disadvantaged and prevented from accessing opportunities, first, education, then employment opportunities, and then leadership opportunities within the workplace.

Traditionally in more patriarchal conceptions of the workplace, there may be a notion that emotions are not appropriate for the workplace and that success should be driven solely by tangible results. Employees, especially those from marginalized groups, feel compelled to hide parts of themselves to assimilate into the workplace. How can we co-create a work environment in which care is centered the same way more tangible results are, and all individuals are encouraged to bring more of their full selves to the work?

Roadblocks

Discussing on the ongoing challenges, Amjad said that the MENA region is a change leader in the field of sustainability. As you may already know, in 2018 the United Arab Emirates passed a legislation ensuring that men and women doing the same type of work receive equal pay. The region is dedicated to upholding ideals of inclusion and leveraging its rich demographic diversity to create change. It is essential for people to visit the MENA region and witness firsthand how fast the region is transforming itself every year.

Sara Parvaiz Amjad, in her spare time from the past two years, has studied and invested heavily in various well-being and coaching modalities. She loves meeting new people and as much as she loves spending time with those she already knows. Living in the UAE provides a unique opportunity to interact with instructors, experts, and other students from all walks of life and diverse cultural background. Many of the instructors that come here to conduct classes are travelling instructors in the well-being field. She also facilitates seminars and theater-based workshops on diversity, inclusion, identity, and culture and is a coach and emotional bodywork therapist.



All Photos Are Provided by Sara Pervaiz Amjad

"ALUMINIUM INDUSTRY IS SPREADING ITS WINGS IN MIDDLE EAST REGION": SAHIM AMIN GADAWALA ON RECENT PEGIONAL BOOM

For years, the Middle East has cultivated a thriving center for scrap metal recycling and trading. While facing typical industry fluctuations, the region has consistently outperformed its global counterparts, due in part to its advantageous location at the intersection of Eastern and Western markets.

Additionally, with major developmental projects taking place across the Middle East and in key markets like India and China, the metals recycling industry shows no signs of slowing down. Echoing similar sentiments, Sahim Amin Gadawala, CEO & Vice President of Ala Group stated,

"Major investments in new smelters and production facilities have led to a rapid expansion of the aluminium industry in the area in recent years. The UAE is a significant global producer of aluminium thanks to the efforts of businesses like Emirates Global Aluminium (EGA). Continued development and investment are anticipated to benefit the mining and aluminium sectors in the Middle East in the coming years."

Trusted partner to a range of companies across the recycling industry from processors, refineries, smelters, to manufacturers, the Ala Group head office located in Jabel Ali with yard operation in Sharjah / Ajman & offices in across globe. handles all major categories of scrap and recycled Ferrous & non-ferrous metals along with Plastic scrap, which include aluminium, copper, lead, nickel, and zinc, with substantial interest in other ferrous & non-ferrous metals.

Aluminium Sector Farming Sustainable Goals

Recycling or finding alternative uses for garbage is a pressing problem because of the massive amounts of trash produced daily. Major players such as EGA are very concerned about environmental problems like rising carbon dioxide and nitrogen levels. They see the circular economy as a viable option because their refuse can be recycled by businesses like cement and steel manufacturers.

By taking a circular economy's innovative strategy, they are able to properly classify waste and significantly cut down on it. This novel method is useful for cement and steel producers because they typically have to source 95% of their materials from outside sources. They can make money and help the earth by reusing or recycling EGA waste in this case.

Reduced landfill refuse and gas emissions mean better air quality and less environmental damage from carbon and nitrogen emissions and reduced coal use.



Demand in the environmental sector is rising as a result of the fact that all industries, including building and transit, must actively seek out environmental projects. One needs to be more environmentally responsible with our mining operations, and the building and transportation industries that are helping to make this possible if we want to keep up with the expected rise in demand. Thus, it can be said that the recycling business will be around for the long haul.

"Mining and aluminium are both attempting to position themselves to take advantage of the growing demand for environmentally friendly goods and materials in the market, especially in the construction and transportation sectors," said Gadawala.

"Furthermore, by creating demand for sustainable mining the whole value chain is enriched and eventually the recycling industry also benefits from both from sustainable products and processes.

"Especially the aluminium industry is expanding rapidly especially with companies like ECA spending on developing their sustainable production facilities, which is really a very significant development in the recycling industry," he said.

Elaborating further on metal scrap, that is generally exported to other countries, Gadawala opined, "Environmentally responsible recycling of metal scrap creates more employment, reduces pollution, pays dividends to the federal government, and benefits the economy in other ways."

"Dubai has now become a key aluminum manufacturer and exporter especially in the Middle East. With a bit more infrastructure and more support from the government along with support of some association/organization like BMR, BIR, ISRI & many others we can easily become a world-leader as well." he said.

Such association can help to guide the govt policy to safeguard our future along with sustainable economy.

Hurdles That Are Hampering The Growth

There are several obstacles that must be overcome before more sustainable solutions can be implemented in the metal industry such as high energy consumption, waste management, water use, and environmental impact.

Stretching further on these obstacles, Gadawala said, "We have been seeing several issues. For example, in many cases recycling is not being handled correctly, particularly those businesses that use furnaces. There is a massive need for education in this segment. Furthermore, there are some examples of theft and mismanagement of material allocated for other pursposes. Such practices have to be stopped."

The entire Middle East region is pushing sustainable solutions currently. However, given the low battery recycling rates, experts agree that education and awareness are crucial in addressing the problem and minimising the potential damage to human and environmental health from battery waste.

"Only the government, in my opinion, could have provided us with a superior answer. Factory safety procedures and standards must be defined and communicated. The business needs to take precautions, both financially and in terms of worker safety," further commented Gadawala.

Way Forward

With recycling gaining favour, the region is on its way to becoming a more resource efficient and circular economy. The long-term environmental advantages of can recycling programmes can only be fully realised over time and only if ongoing support and promotion are maintained.

"The government now has machinery which minimises the use of energy while offering more productivity. So I think we should promote their use.

"Saudi Arabia and UAE are coming up with the new awareness campaigns and there are so many companies for waste management also.

"It's also preventing unlawful practices and the growth of nonprofit infrastructure, government SOPs, education and the awareness about climate change and the long-term implementation of these plans.

"I think government is doing a phenomenal work. We also see our kids also learning about garbage separation in their schools.

Gadawala reads up on a wide variety of topics, from plastics to foreign exchange updates and international news. He also enjoys spending quiet moments at home or on his couch in the office, reflecting on the day.



All Photos Are Provided By Sahim Amin Gadawala

INSIGHT INTO THE PROSPECTS OF MINING AND SUSTAINABILITY IN THE SAUDI ARABIA

Natural materials essential to industrialization are abundant across the roughly 2 million square kilometres that make up the Kingdom of Saudi Arabia. The Ministry of Industry and Mineral Resources estimates the mineral riches beneath the soil of the Kingdom to be around USD 1.33 trillion. The mining industry is envisioned to be developed into the third pillar of the home economy by the Kingdom by the year 2030. Consequently, there will be more garbage generated as a result of mining and research in the coming decade. In January 2021, the executive branch released new regulations that incorporate several environmentally and socially responsible and safety-focused provisions.

Since mining requires the exploitation of finite resources, efficient tailings management is essential to the mining industry's transition to a sustainability paradigm. There are two ways to approach sustainability in the minerals business, with the latter building on the former. The first seeks to reduce negative social and environmental effects of the mining project by optimising resource use and management while it is in operation (i.e., sustainable functioning as defined by) (i.e., sustainable development as described by). Renewably-focused businesses have advanced these ideas further (e.g., the fashion industry). However, there is a dearth of research incorporating sustainability measures into techno-economic assessments of mining projects from the conceptualization to the commercialization stages.

Various tailings management systems to harness sustainability

In order to reduce the amount of scarce resources being used and the amount of pollution released into the environment, modern mines around the globe have implemented a wide range of tailings management techniques.

Bricks, tiles, mortars, alkaline-activated materials, geopolymers, and even mine backfill have all been made with solid waste. Industrial-scale backfilling with tailings as a component in paste backfill for underground mines is one example of material recycling. By recycling them as mine backfill, tailings help keep mining refuse out of dumps and save money.



It is crucial to support a sustainable mining operation by optimising backfill systems from preparation to placement, taking into account capital, operating, and maintenance expenses. The expense of repairs and employee safety are both at risk when backfill systems are poorly designed. In order to provide ground support for the underground environment, mine backfilling entails filling voids formed during underground excavations. Typically, tailings are combined with a suitable binder, generally Portland cement, to create mine backfill. Cement accounts for a significant portion of the overall price of backfill, sometimes more than half.

In order to reduce the amount of cement needed, natural pozzolans (such as pumice and volcano ash) and man-made pozzolans (such as fly ash and slags) are blended into cemented paste backfill (CPB). Both the CPB mixture formulation and the desired unconfined compressive strength depend on the mining technique In contrast to cut-and-fill mining, which only needs (UCS) values of 1 MPa, room-and-pillar mining requires UCS values of 5-7 MPa. If CPB will be used in standalone uses, the necessary UCS can be less than 1 MPa. Binder and tailings chemical and physical characteristics have an effect on CPB toughness. After 56 days of curing, for instance, the UCS was higher (0.66 MPa) in natural pozzolan zeolite-replaced CPB than in standard samples prepared with PC (0.50 MPa). After 56 days of curing, the strength of CPB produced with 10, 25, 30, and 35% clay pozzolan was 287, 280, 268, and 268 kPa, respectively Using a cement designed for general use could eventually degrade the UCS in tailings containing sulphide particles like pyrite (FeS2). As a result, pozzolans are used to reduce the effects of sulphate assault by replacing some of the cement in the backfill.

Emerging as a key location for mining business, Saudi Arabia

Honorable Chairman Vice Minister of Mining Affairs at the Saudi Ministry of Industry and Mineral Resources Khalid Al-Mudaifer recently spoke to an international audience of investors about why Saudi Arabia is becoming a significant mining destination.

Eng. Al-Mudaifer stated, "Saudi Arabia is very much open for business, and we have taken many transformational steps to make investing in mining more appealing than ever before. And because of the things that investors have informed us are most important, we've shifted our national perspective, learned more about the nuances of mining, and put more emphasis on stability and predictability. We can make a convincing case that Saudi Arabia is a mining country in the making thanks to the country's rich and varied geological footprint, its transformed mining sector, and its sharp focus on sustainability."

He further pointed out few more sustainable developments in the sector and mentioned that the Miner Sustainability Principle was established to ensure the well-being of miners and the community as a whole. In an effort to strike a better balance between commercial value and environmental protection, the Kingdom has introduced the Mining Sector Sustainability Assurance Initiative. Applicants for mining licences in the country must demonstrate that they will use environmentally responsible methods under the country's new mining legislation. Finally, Vice Minister Al-Mudaifer unveiled the Future Minerals Summit (FMS), the first event to provide a "one-stop-shop" for investors, miners, and other industry stakeholders interested in the mining potential of the Middle East, Central Asia, and North and East Africa.



The Future Mineral Forum stoke a positive note

It was in this manner that the Future Minerals Forum, which wrapped up in Riyadh on January 12th, highlighted the Kingdom's mining sector ambitions and the way in which the mineral exploration industry is shaping up to become the third pillar of the country's economy.

Sustainability was a central topic of discussion among the ministers, industry experts, and think group representatives who gathered to discuss solutions to the sector's problems.

According to the media reports, Johns Hopkins University lecturer and senior associate fellow at the King Faisal Center for Research and Islamic Studies' Energy and Environmental Security, Paul Sullivan, said that the Forum's successful conclusion with unprecedented international participation would likely increase investments in the Kingdom's mining sector.

A larger amount of money could be invested in mining in Saudi Arabia if the Future Minerals Forum is successful. There is hope that it could also contribute to the development of more efficient judicial and regulatory systems in Saudi Arabia. Nonetheless, please be patient. "Saudi Arabia has a lot of mining promise," Sullivan said.

The second day of the Forum, on January 11, featured comments from Saudi Arabia's Minister of Investment Khalid Al-Falih about the country's growing attractiveness as a place for mining firms to set up shop.

All the pieces of the mining puzzle are in place in Saudi Arabia. We have the best laws in the world, the best location, the best financing, and the best energy solution," Al-Falih said.



Adding more sustainable punch

There are concerns about the environmental effect of mining, despite the fact that crucial minerals are required for a smooth transition to green energy.

Not only the mining industry, but all sectors in Saudi Arabia have room to improve their environmental and resource management practices. Sustainability and environmental legislation are crucial. Sullivan told Arab News that without such laws, both business and mining would be major contributors to environmental degradation through activities such as water, soil, and air pollution.

He went on to say, "Saudi Arabia could gain the most from a thriving mining sector that takes steps to reduce negative externalities such as pollution. It's great for Saudi Arabia's public image and the country's future prospects.

Sullivan went on to say that mining legislation and guidelines should be carried out in a manner that protects the public interest.

Some intricate equilibria must be taken into account. To enable sustainable, long-term, and effective mining to contribute to the future prosperity of Saudi Arabia, Sullivan argues that regulations and laws must take into account not only the needs of the companies but also those of the Saudi people, their leadership, and the Saudis of the future.

Mike Henry, CEO of Australia's BHP, said exploration of critical minerals should be accelerated to meet the energy transition goals over the next thirty years, because it is impossible to do so if the world continues to move at the current pace. This was discussed at the Forum, where industry leaders and top officials discussed the importance of sustainability.

To satisfy the demands of the energy transition, the world will require twice as much copper, four times as much nickel, twice as much steel, and twice as much iron ore over the next 30 years, he said.

Suliman Al-Mazroua, CEO of Saudi Arabia's National Industrial Development and Logistics Program, said in a separate panel discussion that the country is working on innovative practices to ensure sustainable operations in the mining sector while also trying to speed up mining operations as a catalyst for energy transition.

MIDDLE EAST ALUMINUM AND THE ENVIRONMENT: CARBON DIOXIDE EMISSIONS AND BEYOND

Demand from industries like transportation, building, packaging, and energy has contributed greatly to the industry's meteoric rise in recent years. Lightweight, malleable, corrosion-resistant, electrically and thermally conductive, inexpensive, and recyclable, aluminum is one of the most sought-after metals. The aluminum industry, however, presents the unusual dichotomy of being both a solution and a contributor to an issue. While iron is the earth's greenest metal, it still contributes to the planet's environmental problems.

Growing aluminum production poses a threat that CO2eq levels will rise to an unsafe level unless significant action is done. In addition, the industry contributes to a host of other sustainability concerns, such as the production of vast quantities of trash and scrap, the expansion of landfills, and the devaluation of resources. Aluminum greenhouse gas emissions must be lowered, and issues ranging from production to disposal must be addressed, so this circumstance necessitates swift action on the part of industry leaders and policymakers. This is a problem on multiple fronts, environmental, economic, societal, and technological. It still has a long way to go before the aluminum business is sustainable, but industry leaders and groups are working on it.

The United Arab Emirates is becoming increasingly instrumental in meeting this need. The United Arab Emirates (UAE) may be best known for its energy and gas exports, but it is also the world's fifth-largest producer of aluminium.

Region takes great pride in the fact that its export of aluminum generates billions of dollars in income, helping to diversify its economy. Now, Emirates Global Aluminium is also playing a crucial part in assisting the UAE in realising its net-zero goals.

The contribution it makes to a more healthy society is another factor fueling optimistic predictions of demand growth. Lighter electric cars and aluminum used to construct wind farms are just two examples of how aluminium use promotes economic decarbonization.

There is no degradation in purity or quality during the recycling process, and aluminium can be recovered indefinitely. Over three-quarters of all aluminium ever mined is still in use today. Aluminum foil used for baking in the 1970s is recycled into a window frame in the 1980s, and then into a beverage can in the 1990s, and so on.

Recycling of aluminium can act as a catalyst

How significant the benefits of aluminium recycling can be is illustrated by the fact that twenty new cans can be produced from recovered material with the same amount of energy required to produce one new can. This is why we want to construct the biggest recycling facility in the UAE, with an annual capacity of 150,000 tonnes.

The majority of the waste aluminium used in the factory's creation of a low-carbon, high-quality recycled aluminium billet will come from the United Arab Emirates and the Middle East and North Africa.

More than half of the aluminium scrap produced in the GCC is currently disposed of or exported, so recycled aluminium will have an instant and positive effect. In addition, we are updating our aluminium production process.

Along with the shipping and aircraft industries and the cement industry, the aluminium industry is among those that are "harder to abate." Additionally, a lot of energy is used up in the making of aluminium. Around 60% of the 1.1 billion tonnes of annual carbon dioxide emissions from the global aluminium industry are attributable to electricity production.

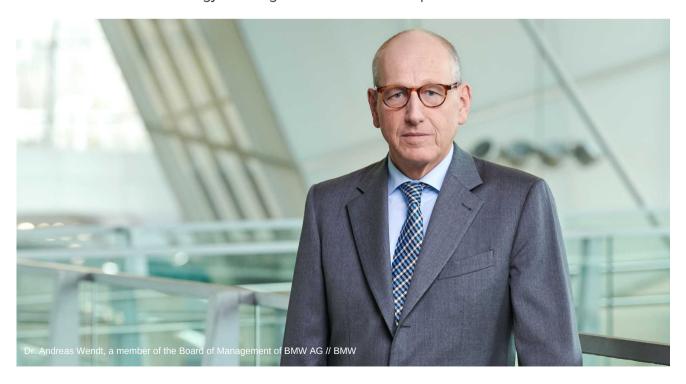
For this reason, EGA has spent the better part of the last three decades developing and implementing cutting-edge methods for processing aluminium more effectively.

Since the 1990s, when we first began expanding our smelter, we have used only our own proprietary technology, and we have retrofitted all of our earlier production lines as well.

In addition, thanks to our efforts, EGA was able to reduce its carbon dioxide output by 35% compared to the sector average for the year 2021.

Low carbon aluminium (Hydro-powered aluminium and inert anode technology)

Direct and indirect pollution during electrolysis is central to the idea of low carbon aluminium. There is no universally accepted standard or meaning of "low carbon aluminium" in the marketplace. The direct and indirect CO2eq emissions of all currently available green aluminium products are less than 4 tonnes. Aluminum electrolysis, anode manufacturing, and aluminium casting are all included in this standard because they are all processes that contribute to emissions. Hydroelectricity and neutral anode and cathode technology work together to reduce CO2eq emissions.



'Low carbon primary aluminium' has already been released by a number of metal manufacturers. Rio Tinto's RenewAl, Rusal's Allow, Hydro's CIRCAL 75R and REDUXA 4.0, and Alcoa's Ecolum are just a few of the most important low carbon aluminium goods on the market today. In a major step forward, in December 2019 the Canadian government and aluminium giants Alcoa and Rio Tinto launched the joint venture Elysis to make the first commercial batch of low carbon aluminium. Apple and the American brewing firm Anheuser-Busch InBev NV have both signed contracts with Elysis to be supplied with low carbon aluminium.

Better fuel economy and lower CO2 benefits

Premium original equipment manufacturers are increasingly turning to aluminium, despite the material's high cost and the fact that its raw state production (smelting) is extremely energy demanding and could therefore pose a problem for CO2 calculations.

For its Landshut foundry, BMW is increasing its use of solar electricity from an aluminium supplier in the United Arab Emirates.

Earlier, BMW announced that it would begin sourcing aluminium made with solar energy immediately.

The business also noted that this is a significant step towards its goal of reducing CO2 emissions from its supplier network by 20% by the year 2030.

The long-term use of aluminium made with green power will prevent the release of about 2.5 million tonnes of carbon dioxide over the next decade, making this a major move forward. This amounts to about 3 percent of the company's CO2 goals for its supply base.

Company aims to be an industry leader in sustainability and to make the methodical adoption of sustainability practices the norm.

Using only renewable energy sources, we can achieve our supply network's CO2 reduction goals by more than 50%.

According to Dr. Andreas Wendt, a member of the Board of Management of BMW AG in charge of Purchasing and Supplier Network, using solar electricity for aluminium production is a significant move in this direction.



Light metal foundry at BMW Group Plant Landshut processes aluminium produced in the UAE using solar electricity to make body and drive train components, including those required for electric drive trains.

Nearly half of the annual needs of the light metal foundry at Plant Landsh will be satisfied by the procurement of 43,000 tonnes of solar aluminium with a value in the three-digit million euro range. The importance of supply networks in reaching CO2 goals BMW predicts that by 2030, CO2 emissions per vehicle in the BMW Group supply chain will have increased by more than a third if no corrective steps are taken.

It claims it wants to not only halt the downward trajectory but turn it around and reduce CO2 emissions per vehicle by 20% from 2019 levels.

According to BMW, it has already reached an agreement with vendors to ensure that all fifth-generation battery cells are manufactured using renewable energy.

BMW also claims that aluminium will grow in importance as e-mobility expands because it is a lightweight material that can help compensate for the hefty weight of batteries in electric cars. As a result, it is taking the initiative to purchase aluminium made using renewable energy.

The issue with aluminium (and why it's so much more costly than steel) is that it takes a lot of energy to create. Electricity generation for pure aluminium production, that is, aluminium from a nonrecycled source.

At this time, EGA will supply only the BMW Group with the aluminium it commercially produces using solar energy; this makes it the first business in the world to do so. about 60% of all greenhouse gas emissions from the aluminium industry worldwide come straight from the alumina mineral compound.

BMW argues that solar power is a great way to cut down on the carbon dioxide produced by metal smelting.

A provider of aluminium to the United Arab Emirates, EGA Emirates Global Aluminium (EGA), headquartered in Abu Dhabi in the United Arab Emirates, is a long-standing supplier to the BMW Group of raw aluminium (UAE). The Abu Dhabi government (through Mubadala Development Company) and Dubai government (through Investment Corporation of Dubai) own it jointly.

For those interested in both bauxite/alumina and basic aluminium smelting, EGA is a good choice. The Emirates Aluminium Company (EGA) claims to be the largest producer of "premium aluminium" in the world and is the largest industrial business in the United Arab Emirates outside of the oil and gas industry. Since 1979,

Due to EGA, the UAE has risen from creating zero aluminium to ranking as the world's fifth-largest producer.

EGA runs a bauxite mine in the Republic of Guinea and alumina refineries in the United Arab Emirates. EGA claims to be one of the biggest suppliers of foundry alloys to the global automotive industry, with more than 400 customers in more than 50 countries.

At this time, EGA will supply only the BMW Group with the aluminium it commercially produces using solar energy; this makes it the first business in the world to do so.

The Mohammed Bin Rashid Al Maktoum Solar Park, located in the desert outside of Dubai, is nearing completion and will become the world's biggest solar park, from which EGA purchases the electricity used in the production of the aluminium destined for the BMW Group.

The Dubai Electricity and Water Authority runs it, and it receives third-party certification that the energy it generates meets sustainability standards so that it can sell its output to EGA.

The BMW Group is EGA's first client for our low-carbon CelestiAL aluminium, and we couldn't be happier about it."

Aluminum has many desirable properties, including its low weight, high strength, and high recycling potential. That's why it's crucial to the progress of a greener society and the possibility of 21st-century living.

Aluminum production methods that minimise environmental impact are preferred. Solar aluminium is a positive development because it takes advantage of the desert's plentiful natural resources to create an essential element for the planet's continued survival.

THE MIDDLE EAST AND GENDER PARITY IN TECHNOLOGY: AHEAD OR BEHIND?

We frequently hear complaints about skill gaps, particularly in the Middle East, from technology leaders who are struggling to meet the demands of digital transformation. Stakeholders in businesses across the area are increasingly being urged to recognise women as their greatest unrealized potential.

Companies like McKinsey are advocating for gender equality in the tech industry on a global scale, lamenting the decline of women in tech positions. Just 4% of Fortune 500 CEOs are women, according to a recent study by the Kauffman Fellows Research Center (KFRC).

According to Mashal Waqar, co-founder and chief operating officer of The Tempest, a media business focused on issues affecting women, "a company with a female founder and a female executive will employ six times more women." This is a quote from a Kauffman Fellows research paper. "However, there is a dearth of transparency and accountability outside of the start-up ecosystem."

Tides of SCIENCE

Waqar and others have been advocating for some time now that business executives in the Middle East take advantage of women's innovation and entrepreneurship. The world will be one step closer to solving this issue when "we start seeing leaders in this region publish organisational data with success stories," she said.

Female talent in the MENA area is abundant, but they are underrepresented in the region's workforces. Hire the appropriate women, not just women to fill a quota, Waqar urged. More significantly, make sure they aren't up against a glass ceiling in your company.

However, progress has been made, particularly in the education of women in technology, according to Sabine Holl, vice president of technical sales and chief technology officer at IBM Middle East and Africa. Holl noted that approximately half of the region's graduates in science, technology, engineering, and mathematics (STEM) are female. According to her, this is significantly greater than in any other educational institution in the world. While she admits "there is great untapped female technical talent in the Middle East", she sees "more women entering technical roles than ever before".

She noted that in her 15 years of experience working in the MENA area, she had seen more women pursuing technical careers than in any other region.



Diversity is encouraged by governments

Sophie Leray, CEO of Naseba, a business facilitation firm specialising in emerging markets, emphasised the significance of government support for diversity-and-inclusion initiatives. In addition, she established the International Economic Conference for Women in Leadership (Global WIL).

Leray was cautiously optimistic about the region's development towards gender equality. "It is not so much that women are underrepresented overall, but more that they tend to be absent from the organisation chart in critical senior positions," she said, explaining that changes in policies and cultures have occurred over the past five years out of concern for a wasted potential in top-level female talent by business and government leaders.

Morphing mindsets

If governments and businesses in the Middle East want to outshine their global competitors in terms of diversity and inclusion, they will need to make more policy adjustments to address the gender parity gap and adapt to the realities of their present labour markets. Waqar, of the Tempest, has mentioned the region's clock-in culture as something that needs fixing.

She suggested that we move away from evaluating workers based on the amount of hours they put in and instead focus on how productive they are and the results they produce. She noted that despite the reluctance of MENA managers, remote and flexible work arrangements should be considered as a means of addressing the issues faced by women in the workplace regardless of their position or degree of seniority.

As the first members of Generation Z enter the workforce, Holl asserts that women now make up more than half of IBM's new hires in the area.

Developing microservices, crypto, the Internet of Things, and data science are all examples of indemand digital skills that are emphasised in graduate programmes, as Holl put it. Diversity of thought, experience, and personal identity enhances creativity, agility, and engagement, and "women play a critical role in our business."

Keeping the bar high

As an example of a "standout success story from the region," Waqar highlighted Womena, a female-focused accelerator, and praised the work of regional organisations like Hopscotch that have concentrated on women's empowerment. Another major player in the startup scene, she said, was Sheraa (Sharjah Entrepreneur Centre), where 53% of the startups were run by women.

Leray of Naseba remarked that "most 'new tech' businesses are very engaged in working towards gender parity," praising the radical perspectives that have resulted in several in-house programmes on diversity and inclusion. Businesses are placing a greater emphasis on training and development programmes and hiring "smart young women in product-development roles," she said.

Leray noted that the healthcare sector was leading the way in terms of diversity policy shifts, but she argued that women's business ownership offered the best chance of achieving gender equality.

See what ladies in the Middle East have accomplished in the realm of technology

Women in the Middle East have made great strides towards careers and interest in a typically male-dominated domain, even as this is still a problem elsewhere.

UNESCO found that 57% of Arab nations' STEM graduates are female, and that 61% of UAE's university STEM students are female. According to another survey, women founded 34% of tech startups in the region.

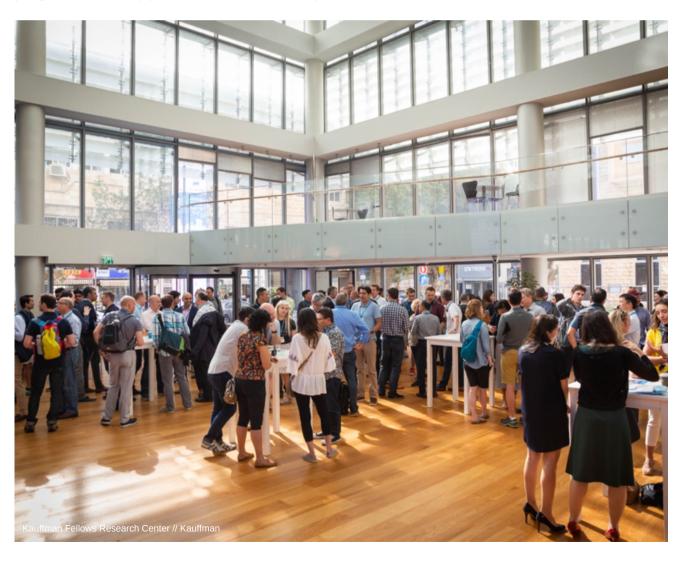
As a woman in a leadership position, I appreciate the guidance and support I've gotten from my male colleagues and the efforts they've made to eliminate discrimination in the workplace. Gheed El Makkaoui, vice president of Careem Food, expressed her gratitude for the opportunity to "pay it forward" by mentoring other women at the company.

Women are increasingly holding places of power in previously male-dominated sectors, such as the transportation and food delivery industries. "This is extremely helpful because it promotes new ideas and different ways of thinking, both of which are essential to establishing long-lasting collaborations," she elaborated.

As a woman working in medtech, a traditionally male-dominated field, I am really pleased to see the steps society has taken to break the bias," said Reham Kilano, clinical operations manager at Eon Dental. That doesn't mean we're out of the woods yet, but we recognise that diversity in the workplace is essential for inspiring the next generation of leaders to realise their own potential, regardless of their gender, ethnicity, or other demographic characteristics.

Many regional businesses are actively promoting women's empowerment because they recognise the worth of a gender-balanced workforce.

It's common knowledge that women can be highly effective in the business world. The benefits of this approach are well-documented, and range from increased business profits to a more creative workforce. Women are assuming the lead like never before in establishing standards for leadership diversity thanks to ongoing discussions and encouragement. True, but what about the job in general? More and more businesses, including our own, are reevaluating internal policies with an eye towards empowering female workers and advancing the dialogue on how best to do so. Sophie Simpson, the Atteline's managing director and founder, said, "Our mantra is practises that help," including establishing concrete diversity goals and establishing programmes to support women in leadership roles.



PATTERNS OF ALUMINUM REUSE IN THE ARAB WORLD

As a result of the Middle East's increasing appreciation for contemporary conveniences, the region's consumers have shown a steady increase in demand for aluminium goods. The use of aluminium can be seen in many different fields, such as transportation, food and medicine packaging, building construction, electronic components, and electrical power transfer. In reality, aside from iron, aluminium is the most widely used metal. However, the aluminium can is the most recycled object of its kind in the world, making aluminium the world's second most used metal.

When aluminium burns at landfills, it releases toxic gases and serves as a breeding ground for mosquitoes, making disposal a difficult job. Aluminum can be recycled endlessly, and doing so has numerous environmental and economic benefits.

Due to its high market worth, aluminium recycling remains a viable business option. Aluminum's high scrap value, low energy requirements, and superb recyclability make it a prime candidate for use in lightweight solutions.

Metal recycling's share of worldwide aluminium production has grown from 17% in 1960 to 34% in 2015 and is expected to reach nearly 40% by 2020. Over sixty percent of all aluminium beverage cans are gathered, and recycling rates for other aluminium products are similarly high. Large quantities of aluminium scrap are produced annually in the Middle East. More than 500 million beverage cans are used every year in the United Arab Emirates (UAE), but only five percent of them are recycled. The remainder are sent to scrap dealers or thrown away in landfills, illustrating the scale of the issue.

The Middle East is home to a thriving aluminium industry that could greatly profit from recycling programmes. Aluminum recycling offers the area a sustainable long-term option by decreasing demand for both raw materials and precious fossil fuels.

EGA plans to build the Middle East's first aluminium reprocessing facility in the UAE

In order to increase aluminium recycling in the United Arab Emirates, a group led by Emirates Global Aluminium (EGA) and including beverage makers, can makers, and refuse management companies, was formed (UAE).

The Aluminum Can Recycling Initiative was formed to spread the word about recycling aluminium drinking cans.

Coaltion participants include the Abu Dhabi Waste Management Corporation (Tadweer), Coca-Cola Beverages, Aujan, Coca-Cola Al Ahlia Beverages, BEEAH Tandeef, Dubai Refreshment, CANPACK, Crown Bevcan EMEA, DULSCO Group, and Veolia.

The goal of the Aluminium Recycling Alliance is to assist the UAE government in developing aluminium recycling policies and procedures, as well as to aid in the construction of aluminium recycling facilities.

The coalition's initial effort will be to fund a research by the International Aluminium Institute into the prevalence of recycling practises and attitudes towards aluminium in the United Arab Emirates. The research's overarching goals are to establish the scope of aluminium recycling in the nation and locate feasible options for improving the process.

Abdulnasser Bin Kalban, CEO of Emirates Global Aluminium, made the following statement: "Recyclability is one reason aluminium is so essential for human development, but every day as a society, we throw too much of this valuable metal away.

For the greater good of UAE community and economy, EGA has taken up advocacy for the Aluminium Recycling Coalition.

Both Mariam bint Mohammed Saeed Hareb Almheiri, UAE Minister of Climate Change and Environment, and Abdullah Bin Touq Al Marri, UAE Minister of Economy, were present for the launch of the alliance.

The UAE's position as a global leader in international efforts towards green development will be strengthened, Al Marri said, and the alliance will help the country achieve its goals for the circular economy by 2031 and create a more robust and competitive knowledge economy.

The United Arab Emirates (UAE) has decided to prohibit disposable plastic shopping bags as of January 1, 2019.

In January of 2026, the nation will outlaw the use of plastic and foam items like cups, plates, and silverware.



Shifting dynamics in the Middle East

Speakers at the Bureau of International Recycling (BIR) Non-Ferrous Metals Division meeting on October 18 reported that primary producers of nonferrous metals in the Middle East area were using secondary metal feedstocks and more sustainable processes in their production. The conference was held in conjunction with the BIR's 2022 World Recycling Conference, which took place in Dubai, UAE (UAE). Global metals producers such as Novelis and Aurubis are mirroring the pattern by investing in the United States and Europe.

Primary metal makers are increasingly utilising scrap and renewable energy in their production processes, as reported by two nonferrous operators from the United Arab Emirates: Fadi Awadhalla of Emirates Global Aluminium (EGA) and Abdullah El Doukhei of Ducab Metals Business (DMB). In an effort to achieve their net-zero goals, they also claimed that metals producers' customers would be ready to pay a "green" premium.

Casthouse, a subsidiary of Dubai-based EGA, has a goal of becoming a worldwide sustainability leader in the aluminium industry by producing only Aluminium Stewardship Initiative- (ASI-) certified products by the year 2030, as outlined by Awadhalla, the company's vice president. Performance and chain of custody standards for the ethical production, sourcing, and management of aluminium have been created by the Aluminium Sustainability Institute (ASI), based in Melbourne, Australia.

To achieve its goal of net-zero greenhouse gas emissions across its operations and supply EGA plans to "vastly increase output of CelestiAL, the world's first metal produced with solar power," as stated by Awadhalla. He noted that BMW was receiving more than 40,000 metric tonnes of CelestiAL annually, but that "all the automotives want it" and are willing to pay for the luxury product.



In the United Arab Emirates, EGA has planned a recycling plant that will turn post- and preconsumer scrap into billet at the rate of 150,000 metric tonnes per year by 2024. An additional remelt facility of 30,000 metric tonnes is being considered by the business. Scrap supply possibilities could arise if, as Awadhalla pointed out, EGA established recycling facilities closer to its customers, particularly in Europe and North America.

He remarked on how unfamiliar his group was with composting and expressed a desire to learn more. "If you had asked me about recycling ten years ago, I would have said, 'Nice to meet you, but this is none of our concern." Everyone who produces basic goods must consider recycling now.

DMB, which is part of the Dubai-based Ducab Group, focuses on producing high-quality aluminium and copper goods, 75 percent of which are exported. According to senior plant manager El Doukhei, the business began using scrap in 2017, and that number is expected to rise to 25 percent by 2020. The business had planned to increase its use of scrap even as its use dropped slightly during the COVID-19 pandemic. However, El Doukhei noted that varying quantities of waste material and inconsistent quality, especially with regards to impurities in recycled copper, are obstacles to expanding scrap usage. The industry needs to make a serious commitment to quality.

Awadhalla stated, "EGA, long-term, would prefer the basic LME trading to be green." This was in response to a question about whether or not the London Metal Exchange (LME) should host distinct trading for "green" and nongreen metals. Anything that isn't environmentally friendly needs to be reduced.

According to him, international buyers have been hesitant to commit to deals in 2025 unless they are assured of receiving aluminium products with minimal carbon emissions.

BIR Nonferrous Division President Dhawal Shah of Metco Ventures LLP in Mumbai, India, remarked on the presentations and the region's increasing preference for scrap and sustainable production, saying, "You can see the change and the dynamic—what it's the future looks like."

Divisional board member Sebastien Perron of Labrador Recycling, a metals trading and logistics firm based in Springfield, Massachusetts, presented a BIR World Mirror-based market report at the event, noting that, up until very recently, business conditions in the secondary nonferrous metals industry remained generally positive. A far more difficult playing field has emerged, however, as a result of rising geopolitical tensions and macroeconomic problems? Perron added that things were made worse because some countries were looking inward and contemplating policies that are antithetical to free trade.



MIDDLE EAST IS MINING MINERALS WITH SUSTAINABILITY AS ITS LEADING TOOL

The mining industry is entering a new era, and Saudi Arabia stands to profit from the Tethyan belt's unrealized potential.

Raw materials like copper, lithium, nickel, graphite, and others are needed in large quantities due to the scope of the energy shift. Materials mined from the earth's core are used in electric vehicles, wind generators, solar panels, batteries, and other essential devices that are helping the world become less reliant on natural fuels.

The problem that countries all over the world are facing is the fact that the anticipated demand for critical materials used in the energy shift greatly exceeds the existing supply. Lithium, cobalt, and graphite demand is expected to increase by 500%, while nickel and copper demand will increase by 100% and 7% respectively, according to the World Bank's Climate-Smart Mining team.

Resources' vice president Darryn Quayle predicts that more of these minerals will need to be discovered, extracted, and processed worldwide. Also, "this extra supply might not even originate from conventional mining regions."

Transforming our energy system is global in scope. The provision of vital materials for decarbonization will involve Africa. In any case, the worldwide push for zero pollution is heightening interest in prospective new mining regions.

A geological foundation, the Tethyan mineral belt stretches across two continents and 33 nations, beginning in western France and continuing eastward through the Middle East and 'daylighting' in Malaysia. Base metals abound in the region. In spite of this, much of it has been under-explored to this point, making it ideal for making groundbreaking findings.

Unlike mining zones in the Rockies or Africa, "the belt" is a relatively unexplored part of the planet, according to Quayle. But our findings indicate there are significant deposits of copper, lithium, and other key materials for the energy transition below ground.



Changes in Saudi Arabia aimed at creating a low-carbon economy

Saudi Arabia is undergoing the most important and economic transformation in its history, and this coincides with a period of high demand for energy transition materials.

Quayle claims that Saudi Arabia is diversifying its economy away from its reliance on oil and gas as the country opens up to the world. The government there recognises the importance of low-carbon energy to its mining and manufacturing sectors, and this recognition has helped shape the country's resolve to decarbonizing by 2060.

Quayle explains that the mining industry, despite being an integral part of the answer to decarbonization, must also decarbonize. It's also a lot simpler in some locations than others. Implementing the use of lower-carbon energy sources is crucial during this period of change. And that process kicks off the instant mining companies start taking stuff out of the ground. Energy use in the mining industry and its supply chain accounts for about 12% of global production, rising to over 20% in some developing nations. Because of the nature of working with energy-transition materials, the original battery production can use up to twenty times as much energy as the battery can store.

Over the course of a battery's lifetime, the CO2 savings build up, he says. An electric vehicle's carbon footprint is greater if its anode was manufactured using coal-fired electricity rather than renewable energy. So it's crucial to consider the carbon density of the energy required to mine and then produce battery essentials like anode and cathode.

Green energy for the mining sector

Above and below ground, the Middle East, and Saudi Arabia in particular, have many benefits. The environment is conducive to mining and refining on a massive scale that can be done sustainably.

Quayle argues that Saudi Arabia can create renewable energy using both its underground resources from the Tethyan belt and its abundant natural resources from the sun and the wind above ground. The extraction and processing of these energy transition materials can be done more cheaply and with a smaller carbon impact if mining companies and minerals processors in the Kingdom use renewable energy to power their operations. That's a major selling point for eco-friendly products.

Plans are already in place to expand Saudi Arabia's budding mining sector, so the country won't have to start from scratch. With its abundant low-carbon energy, Saudi Arabia is positioning itself as a hub for the world's most energy-intensive sectors. Besides its use in mining, anodes and cathodes are produced for batteries, as explained by Quayle.

While improvements to facilities are necessary, high-end aspirations are apparent. Saudi Arabia has fantastic pipelines and ports for oil and gas, but you can't fit cathode and anode material into a pipe, so plans are in place to triple the rail network and add an additional 1,000 km of track to transport the million tonnes of raw material to processing facilities, onto ports and from there, around the world."

The competition for raw resources

As the automotive industry transitions to all-electric vehicles, there is a worldwide race to construct 'gigafactories,' which are massive battery plants that create hundreds of thousands of battery packs.

The world currently has 308 gigafactories in the works, according to Quayle. Over 200 are located in China, with the remaining in Western countries. These megafactories have a massive insatiable appetite for battery-related raw materials, far exceeding our current capacity to satisfy it.

Quayle elaborates, saying, "The Middle East has a key part to play in addressing these shortages." Over the next 15 years, it will be able to meet this need. While it may take some time, Saudi Arabia has the potential to become the hub of an integrated mining supply network for critical materials used in the energy transition.



Quayle claims that Saudi Arabia has the capacity to collect and transport vast quantities of highquality cathode and anode material to the gigafactories of battery manufacturers.

According to Quayle, "producers can sell it to an interim cathode or anode maker provided a mine produces a product that fits a certain specification." Large quantities of high-quality cathode and anode material can be produced in the Kingdom and shipped to major clients in Europe, North America, and Asia.

And if it can handle raw materials close to the mines, which are likely dispersed across the Tethyan belt, it could save a lot of money on transportation and streamline the supply chain. And they can do it with cheap, renewable electricity in Saudi Arabia.

The future of Saudi Arabia's manufacturing sector

The new era of mining requires Saudi Arabia, which has a long history of executing large and technical infrastructure projects in the oil and gas sector.

Quayle argues that "mining has an opportunity to rewrite its position in industry." "The global mining industry as a whole needs to work together to address some basic challenges, such as supply chain disruptions and raw material shortages, in a relatively short amount of time. Prospective miners in regions with underexplored deposits of key decarbonization materials, such as the Middle East, stand to benefit from this once-in-a-generation opportunity.

Quayle elaborates, saying that by supplying a new group of customers who are "wholly focused on decarbonization," Saudi Arabia can diversify its economy. "And it can speed up the transition to carbon neutrality by providing the world with the essential Tethyan belt materials," the authors write.

The mining sector in Saudi Arabia is leading the way in terms of ESG compliance

Last year, Saudi Arabia attended Australia's premier mining industry event, the International Mining and Resources Conference, as part of its efforts to transform its metals and minerals sector into an engine of sustainable development and driver of the clean energy transition both at home and abroad (IMARC).

During the conference, it discussed its plans to make mining a more ethical and ESG-friendly industry. Bandar Al Khorayef, Minister of Industry and Mineral Resources, was joined by Khaled Al-Mudaifer, Vice-Minister of Mining Affairs, and other high-ranking officials from the Ministry of Investment, the National Industrial Development and Logistics Program (NIDLP), the Saudi Industrial Development Fund (SIDF), and the Saudi Geological Survey as part of the Saudi delegation that participated under the banner "Invest Saudi" (SGS).

Growth in the mining industry has been stymied, he said, by factors such as geopolitical tensions, resource nationalism, sluggish supply networks, and a lack of investment.

Saudi Arabia is "strategically situated" at the crossroads of Asia, Africa, Europe, and the Middle East, and has a sizable domestic market for minerals and metals.

The country of Saudi Arabia "has all the competitive advantages to become a centre of excellence in sustainable mining development and progress," he continued.

The Mining Sustainability Principle was established by the Kingdom as part of a larger set of legal and regulatory changes made in recent years to attract more investment to the mining industry while maintaining a focus on sustainability.

As a result, modern mining applications are evaluated based on their environmental, social, and governance (ESG) credentials to guarantee that the country's mineral riches is used responsibly to better the lives of future generations.

Minerals and metals, as noted in the UN's Sustainable Development Goals, can spark economic development, fortify jobs, and build more resilient infrastructure. Al Khorayef observed, "We are leveraging the sector's growth in Saudi Arabia to support economic diversification and social transformation, while also contributing to the regional and global mining industries' sustainable development."

Since the mining industry in Saudi Arabia was reformed, the nation has attracted unprecedented mining investments. The country's mining revenue grew by 27% annually between 2020 and 2021, thanks to the 145 mining licences granted and the \$8 billion in FDI secured that year.

Furthermore, the Kingdom aims to become an industrial powerhouse highlighted by integrated green value chains, such as green steel and electric vehicle (EV) battery manufacturing, by attracting investments worth \$32bn to the mining and minerals sector.

The second Future Minerals Forum (FMF), which will be held in Riyadh from January 10-12, 2022.





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THE SUSTAINABLE DEVELOPMENT OBJECTIVES OF THE MIDDLE EASTERN ALUMINIUM INDUSTRY ARE BEING AIDED BY CUTTING-EDGE TECHNOLOGICAL INNOVATIONS

The United Arab Emirates (UAE) introduced new green building codes in March 2022. These codes outline the conditions and specifications that all new buildings must satisfy to reduce their environmental impact and utility bills.

The Emirates Green Building Council (EmiratesGBC) in the United Arab Emirates (UAE) has reported a threefold rise in the number of net-zero certification applications it received in 2022 compared to 2021. The desire for the council's other green building certifications has also gone up.

"The demand is being fueled in part by the introduction of ranking systems like Estidama in Abu Dhabi, Saafat in Dubai, and Burjeel in Ras Al Khaimah. Dr. Ali Al Jassim, Emirates GBC head, explains that the organization's efforts to promote sustainable built environments are in line with the government's goal of reaching net-zero emissions by 2050, as outlined in the Net Zero by 2050 Strategic Initiative.

Developers are doing their best to incorporate green technology into their initiatives, as well as obtain the necessary certifications.

Methods for achieving zero-waste production in the Gulf region

Emissions reduction in the manufacturing sector needs innovative and bold approaches. Embedding the principles of a circular economy, Bahrain, like many other GCC nations, aims to create a cutting-edge industry based on technological innovation and sustainability. Which is why it's so important to foster conditions where ideas from the private sector can thrive.

Metals like aluminium are used as an illustration. Every year, the world makes about 65 million metric tonnes and generates one million metric tonnes of aluminium dross, a byproduct of the production process that is highly impure. Aluminum producers have long practised dross recycling, but traditional recycling techniques still leave a sizable carbon impact. Fortunately, EY analysis shows that TAHA International is creating the capability to recycle aluminium dross with nearly zero carbon emissions, using a technique that significantly outperforms other ways of dross recycling and results in eighty percent fewer emissions.

A growing awareness of solar energy's potential game-changing impacts is emerging in the Gulf region. Solar power is not only the most viable option for home energy needs, but the area is also becoming increasingly important in the production of solar technology. The installation of solar technology is being driven by the Gulf states, from the building of a 100-MW solar park on top of a landfill site in Bahrain to the efforts of existing manufacturers like Arla Foods to green their energy supply. Cooperation between the private sector and the public sector is important, especially in the region's smaller and highly urbanised countries, where there is little unused land to host solar panels.

The adoption of cloud computing to boost operational effectiveness is also crucial to a viable future. Whether a company is public or private, it can benefit from integrating data collection and analysis tools into its energy infrastructure in order to gain a deeper understanding of its consumption patterns and take appropriate steps to improve the efficiency of its production facilities. For instance, Mondelz International has created cloud-based technology to track the consumption of water, electricity, and natural gas in its Bahrain facility. Positive changes have already been observed, with 2020 showing a 65% decrease in CO2 emissions from the factory compared to 2018, and 2020 showing a 70% decrease in total waste for the same timeframe.

Producing aluminium in a safe manner, with the aid of technology

In the global and corporate race to net zero, green innovations will play a critical role.

Particularly in the GCC, where the need for robust action on climate change is implicitly recognised, the aluminium manufacturing sector is generating important opportunities for technological and sustainable innovations that will drive this change.

Future action on sustainability will be characterised by cooperation at all levels of society, across borders, and across continents, as well as by technological solutions. It is crucial for the ongoing operation of our societies, and doing so is not just a financial and economic necessity. The manufacturing sector in the GCC is poised for growth, with the aid of green technologies.

In order to lower greenhouse gas emissions, EGA upgraded the gas turbines at the Al Taweelah power facility

For its Al Taweelah power plant, Emirates Global Aluminium (EGA) worked in tandem with the American energy technology firm GE Power to modernise four existing GE 9F gas turbines. This was done in an effort to reduce the plant's impact on the environment by reducing carbon dioxide pollution. As a result, the United Arab Emirates would be closer to realising its Net-Zero strategic plan by the year 2050.

The upgraded facilities would create 72 MW more power than they did with those four turbines while using the same amount of fuel. As a result, yearly GHG emissions would be reduced by 74,000 tonnes to produce the same 920 MW of electricity as before, which is equivalent to taking 16,000 cars off UAE roads.

United Arab Emirates' Aluminum Recycling Coalition Welcomes CANPACK

The United Arab Emirates (UAE)-based sustainable packaging solutions provider CANPACK is pleased to declare its membership in the Aluminium Recycling Coalition, which was established in Dubai on January 15 of this year by Emirates Global Aluminium (EGA).

By spreading information about how to recycle used beverage cans and why doing so is essential for the environment, society, and the economy, the Aluminium Recycling Coalition in the United Arab Emirates (UAE) hopes to increase the amount of aluminium being recycled in the country. The Environmental Protection Agency (EGA), the Abu Dhabi Waste Management Company (Tadweer), the Aujan Coca-Cola Beverages Company, the Coca-Cola Al Ahlia Beverages Company, BEEAH Tandeef, the Dubai Refreshment plant that bottles Pepsi, CANPACK, Crown Bevcan EMEA, DULSCO Group, and Veolia are all part of the Coalition.

His Excellency Abdullah Bin Touq Al Marri, Minister of Economy for the United Arab Emirates, and Her Excellency Mariam bint Mohammed Saeed Hareb Almheiri, Minister of Climate Change and Environment for the United Arab Emirates, were present at the formal launch of the Coalition.



Malgorzata Podrecka, Group Legal, Sustainability & PR Officer at CANPACK, commented on the company's decision to join the Coalition, saying, "CANPACK is delighted to join the prestigious Aluminium Recycling Coalition in the UAE as we believe it is only through collaboration that we will be able to achieve a lasting, positive, and meaningful impact on the environment and society." Together, we can combat climate change, advance a cyclical economy, strengthen local communities, and guarantee that the United Arab Emirates' aluminium sector will be around for the long haul. Simply put, it's a great chance for the United States to take the lead on sustainability problems on a global scale.

The Coalition's first initiative is to fund a research by the International Aluminium Institute on aluminium recycling rates and behaviours in the United Arab Emirates (UAE) in order to better grasp the scope of the problem and the range of possible solutions. Together, the Alliance and the Government of the United Arab Emirates (UAE) plan to advance the country's aluminium recycling infrastructure.





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