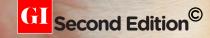


THE CLIMATE PENPAL TOP 100 MIDDLE EAST SUSTAINABILITY VOICES 2025









EXECUTIVE SUMMARY

COP29 is the United Nations Climate Change Conference taking place in Baku, Azerbaijan. UN Climate Change Conferences (or COPs) take place every year, and are the world's only multilateral decision-making forum on climate change that brings together almost every country on Earth. To put it simply, the COP is where the world comes together to agree on the actions to address the climate crisis, such as limiting the global temperature rise to 1.5 degrees Celsius, helping vulnerable communities adapt to the effects of climate change, and achieving net-zero emissions by 2050. COP29 will bring together world leaders and negotiators from the member states (or Parties) of the UN Framework Convention on Climate Change (UNFCCC) to further global progress, with business leaders, young people, climate scientists, Indigenous Peoples, and civil society sharing insights and best practices to strengthen global, collective and inclusive climate action. Among the key priorities of COP29 are securing a new goal on climate finance, ensuring every country has the means to take much stronger climate action, slashing greenhouse gas emissions and building resilient communities. Also in focus will be the next round of national climate plans, or NDCs, currently being developed by countries ahead of next year's deadline and ensuring these bolder, fully implementable and investable strategies and targets are economy-wide, focus on transitioning away from fossil fuels, and keep the world on track to 1.5 degrees of warming.

Gulf Intelligence has proactively created platforms that serve as dynamic spaces for sustainability leaders to exchange knowledge, ideas, and strategies, accelerating the pace of climate action. The insights presented in this report are a culmination of commentary harvested from podcasts over the course of 2023.



Source: The content within this report was harvested from the Mashreq Sustainability Dialogues Podcast Series 2023, The Middle East & Africa Forum for Sustainability Leaders Podcast Series 2023, The Gulf Intelligence Energy Markets Forum 2023, Hanan Sakr an active participant across both platforms https://tinyurl.com/yh8em9s2 and Ibrahim Al-Zu'bi's interview with ICE https://tinyurl.com/4hznen9p. All of the platforms sourced, have already been published publicly, and were produced by Gulf Intelligence. Any future use of this material must cite this report in full.

*THE SUSTAINABILITY LEADERS FEATURED IN THIS REPORT HAVE NOT BEEN RANKED IN ANY SPECIFIC ORDER. THE REPORT CAPTURES COMMENTARY ON THE NEXT STEPS NEEDED TO CREATE A SUSTAINABLE FUTURE FOR ALL.

KNOWLEDGE PARTNER: CLIMATE PENPAL

Climate Penpal, founded by Maha Hana Evers, is a global initiative designed to foster dialogue and collaboration among students from diverse corners of the world on the profound effects of climate change. Through the platform, students share their experiences and insights, empowering one another to address the climate challenges facing their local communities. At the heart of Climate Penpal is the 50% Carbon Pledge, where students commit to reducing their personal carbon footprints by half. This pledge encourages students to take practical actions in their daily lives, such as making more sustainable choices in how they commute to school or what food they include in their lunchboxes. By making small but impactful changes, students engage directly with their schools and communities to reduce their carbon footprints, while fostering a sense of responsibility and solidarity. Another key objective of Climate Penpal is to improve Sustainability Literacy among school students, helping them understand the complexities of environmental issues and their role in creating solutions. In addition, Climate Penpal works with schools worldwide to develop innovative certification programs focused on sustainability, equipping students with the knowledge and skills to lead in sustainability. By integrating these certifications into educational curricula, Climate Penpal envisions a future where youth are not only informed about climate change but also take an active role in creating sustainable solutions.

MISSION STATEMENT

CLIMATE PENPAL is an initiative to get students from across the world to educate each other on how Climate Change is impacting their respective countries.

PURPOSE

CLIMATE PENPAL is a tool to help young people claim ownership of their small piece of the problem and provide their slice of the solution.

ACTION STATEMENT -50% CARBON PLEDGE



www.climatepenpal.org







Daxita Rajcoomar

Chief Sustainability Officer, Middle East and Africa ENGIE

Building a sustainability strategy from the ground up

My first suggestion would be trying to map out the organization's strategy and long-term vision. It's also important to understand what needs to be documented and what needs to be reported. Then you will know who is reporting what, where they are reporting it, and how you can access it. You want to get to the status quo of where you are in a business. Once you have the status quo, then you understand if you have a vision as an organization or not. How can I then build on this data and support the vision of a board of shareholders or an executive committee? For example, if you know your status quo on your carbon footprint is so many million tons, then the next step is to establish where you want to get to. Building that kind of framework and then taking it up to the next level of leadership is vital for putting a sustainability strategy in place.

Key skillsets of a Chief Sustainability Officer

Having a strong health, safety, and environmental background will help you leap forward as you roll out sustainability strategies. However, you may not necessarily have the capabilities on other social indicators. This is where you would need to work with different stakeholders in the business and build that capacity. It all goes back to what's the priority for an organization and where the need to prioritize certain areas that push the sustainability agenda is. In terms of longevity though, one should really look at who could be cross-functional and who has a wellrounded vision for the entire organization.

H.E. Sharif Salim Al Olama

Undersecretary for Energy and Petroleum Affairs UAE Ministry of Energy & Infrastructure

The UAE anticipates that by the year 2031, we will be producing around 14 million tons of hydrogen per annum—both green and blue. We are taking measurable steps in terms of delivering what we anticipate will be a major contributor to our vision for diversifying our energy mix. We have around seven projects that are currently at different levels of maturity. Today, there's only grey hydrogen in our refineries and the quantities are very limited. But we have test-sent blue ammonia cargoes to Europe and Japan through ADNOC. We are also working on studies to produce pink hydrogen, capitalizing on the heat from our nuclear reactors.

As part of the hydrogen strategy, we have identified hydrogen oases-one in Ruwais and one in KIZAD, Abu Dhabi. I see Fujairah as a frontrunner to become one of these future hydrogen oases. It is the third biggest bunkering port in the world, with significant storage facilities and all the infrastructure required to enable hydrogen. Fujairah's geographical location and access for shipping routes is also key; it could allow us to import all the equipment we need to produce hydrogen and allow us to export to the likes of Japan, South Korea, and others. Today, only blue hydrogen is economically feasible, so this is where we are going to start, eventually transitioning into green as we've seen done in Europe.

Main challenges to the UAE developing a hydrogen hub? One has been cost. When the UAE started with renewable energy back in 2006, the kilowatt hour was around \$33. Today, it's about \$1.32, so a big improvement. That is critical for green hydrogen because you need cheap energy to produce that. Today, green hydrogen is sold in the market at around \$6 to \$8, which is still excessive. We are trying to find solutions through R&D to bring that cost down. The other challenging aspect is transportation and distribution. From a customer perspective, the UAE has established many international partnerships with countries like Germany, Japan, India, and South Korea. By 2030, Japan will require around 2.1 to

Dr. Mohammed Al-Surf

Founder and President at Sustainability Professionals of Saudi Arabia (SPSA), Zero Carbon Advisor & Training Director at Tilad Group

The need to connect multiple sectors

When we talk about innovation today, we can summarize it in one word: industry 5.0. The industry is moving at a very fast pace where different sectors need to connect, collaborate, and integrate with each other. For the food, water, and energy nexus, there are lots of areas where we need to focus on, especially if we are going to utilize industry 5.0 efficiently. Underneath that, we are going to find energy and water efficiency practices for mass food production and irrigation. At the same time, we need to take into consideration the circular economy, which we cannot neglect. Integrating all those aspects is the key to utilizing industry 5.0.

Doubling efforts to bridge academia and industry

The gap between academia and industry is narrowing down through collaborations from different entities. Many institutions are developing their R&D capabilities to attract experts and are organizing events to inform students of what the industry has to offer before they graduate. We may need to train educators to be able to connect with professionals and vice versa. However, universities are doing their best to develop that connection. There are different grants that help connect both industry and academia. Additionally, government entities like the Saudi Council of Engineers and the Saudi Contractors Authority are developing their own education and training programs to bridge that gap, either for undergraduates or for new graduates entering the market. There is a lot of movement happening, but there is still lots of ground to cover.

Connecting foreign experts with young local talent

Developing capabilities and talent is what drove me to establish the Sustainable Professionals Association of Saudi Arabia. The objective is to harness the expertise of expats coming to Saudi to deliver their expertise in the giga-projects and connect them with the young Saudi nationals to learn and develop their capabilities.







Razan Khalifa Al Mubarak

President

International Union for Conservation of Nature

Razan Al Mubarak, elected President of the International Union for Conservation of Nature (IUCN) in September 2021, is the second woman and the first from West Asia to lead the organization. She is also the UN Climate Change High-Level Champion for COP28 UAE. With over 20 years of experience in sustainability, Razan has led initiatives in environmental protection, species conservation, and climate action. As Managing Director of the Environment Agency - Abu Dhabi (EAD), she guided the UAE in doubling protected wildlife areas and adopting carbon reduction targets. Her leadership also included overseeing one of the world's largest mammalian species reintroduction programs.

Razan founded the Mohamed bin Zayed Species Conservation Fund, which supports thousands of species conservation projects worldwide. She has chaired and served on numerous boards, including the International Centre for Biosaline Agriculture and Masdar, and is an advisory board member for the Rockefeller Foundation Economic Council on Planetary Health and the Cambridge Conservation Initiative.

Her career in conservation began in 2001 with Emirates Nature, and she holds an MSc from University College London and a BA from Tufts University.



Dave Ernsberger

Co-President S&P Global Commodity Insights

Dave Ernsberger is co-President of S&P Global Commodity Insights and a member of S&P Global's Executive Leadership Team.

Most recently, Mr. Ernsberger was Head of Market Reporting and Trading Solutions at S&P Global Commodity Insights. In that role, he was responsible for managing Platts commodity price benchmarks worldwide, including market reporting, news coverage and exchange relationships, from well-established markets like oil and gas through to emerging market environments like new Energy Transition commodities and recycled materials.

Prior to that, Mr. Ernsberger served in a variety of roles at Platts, including Head of Oil Content; Editorial Director for Asia (based in Singapore), and Houston Bureau Chief. He joined Platts in 1996 as a metals reporter in London, and launched coverage of Europe's thenderegulating gas and electricity markets in 1999.

A native of Boston, Massachusetts, Mr. Ernsberger holds a bachelor's degree in philosophy and politics from Warwick University, England, and a master's degree in international relations from Southampton University, England.

Hawazen Nassief

Head of Sustainability & Stewardship Public Investment Fund (PIF)

Sustainability is pushed from the top and will be harder for some sectors

One of the positive elements about what's happening in Saudi's push towards sustainability is that the support for sustainable practices comes from the very top. The government is encouraging or requiring many businesses to comply with sustainable practices while committing to net-zero by 2060, which also drives a lot of changes at for corporates to develop their own transition strategies. One of the challenges is that the transition will require a lot of investment for the high-emitting sectors. Some of the technology that will be needed to facilitate the transition isn't currently available at scale or available at all. Despite these challenges, major businesses like Aramco and Acwa Power already have net-zero commitments in place and are working towards either reducing emissions or offsetting them until a better alternative is available at scale.

The position of Chief Sustainability Officer is becoming more prominent

For incorporating sustainable practices, there is no one-size-fits-all approach. Every company decides what's best for them within the context of their business. Nevertheless, what I see more and more of is that a lot of companies are creating sustainability committees or ESG committees on the board to oversee its performance by board members who set company-wide key performance indicators. Companies are also increasingly hiring chief sustainability officers, although they might not always go by that name. We also see companies still referring to that type of position as CSR – corporate social responsibility – and combining sustainability and CSR into one position. What's promising is that these kinds of new positions are a global phenomenon and that overnight we have sustainability becoming more prominent at the board level.

Oil windfalls are used to invest in greener technologies

As one of the biggest oil producers in the world, Saudi Arabia concentrates on research centers to produce technologies that will help the oil and gas industry around the world produce energy in more sustainably ways. Saudi Arabia is investing a lot in developing technologies that are important to that industry but also collaborating across industries and borders to fund technology companies around the world that will produce climate tech relevant for the world of tomorrow.



Chief Executive Officer Sharjah National Oil Corporation

SNOC Publishes Greenhouse Gas Emissions Report for 2021 & 2022

Sharjah National Oil Corporation, SNOC, is proud to announce the publication of its Greenhouse Gas (GHG) Emissions Performance Reports for the years 2021 & 2022, highlighting the organization's dedication to environmental sustainability and transparency.

Key highlights from the GHG Performance Reports include: 1. Emissions Performance & Reduction Initiatives, detailing GHG performance and categorizing

the sources of carbon emissions, as well as the various initiatives undertaken by SNOC to

- minimize such emissions.
- SNOC Renewable Energy Usage, mainly solar power.
 Carbon Intensity Metrics, measuring SNOC emissions, per-business type, and highlighting
- efficiency improvements in its operations.

In January 2023 SNOC announced its ambitious committed target of Net Zero by 2032, covering Carbon Emissions, on Scopes 1 & 2, from all operations under its control. Through this publication of GHG Performance Report, SNOC has taken a tangible action and a firm step on the path to achieving Net Zero target by 2032. SNOC has been one of the first organizations to sign up for the UAE Climate-Responsible Companies Pledge initiated by UAE Ministry of Climate Change & Environment (MOCCAE) in February 2023, in which transparent reporting is a main commitment under the Pledge.

SNOC's GHG performance reports provide a comprehensive overview of the company's emissions data, reflecting energy consumption and environmental impact for the years 2021 & 2022. Despite its rich operational history of emissions reduction achievements since the year 1998, SNOC has selected 2021 as the base year for its GHG performance monitoring and reporting. The reports, which have been meticulously compiled in accordance with internationally recognized sustainability reporting standards, Greenhouse Gas Protocol and ISO 14064-1, are further supported by Independent Quality Assurance Statements issued by DNV Business Assurance Group AS, who conducted an independent audit and verification of the methodology and reported figures.







Danah Dajani

Senior Vice President – Partnerships and Programs Abdulla Al Ghurair Foundation

Prior to taking up her current position, Ms. Dajani managed the AI Ghurair Refugee Education Fund, which is administered by the AGF. She has extensive management experience leading large-scale education, youth, and gender development initiatives and programs.

Previously, she was the Regional Manager of the Stevens Initiative at the Aspen Institute, Deputy Director General of the Jordan River Foundation, and Director of Madrasati. Ms. Dajani holds an MA in Social Research from the University of Bath and an MA in Gender and Development from the Institute of Development Studies at the University of Sussex.

She is also a Chevening Scholar and an Eisenhower Fellow.



Sameera Fernandes

Chief Sustainability Officer & Board Member **Century Financial**

Enhancing financial and digital literacy for frontline workers

We are currently working with four types of communities: frontline workers, women, corporates, and the education sector, which plays a vital role in instilling basic financial principles. Century Financial has launched a campaign in partnership with Dubai Chamber, stockbrokers, and the investment services community to empower frontline workers with financial literacy skills. This initiative is designed to address the diverse needs of multicultural environments while considering linguistic barriers.

One area that requires particular attention is digital literacy. Many workers are wary of digital scams and struggle to distinguish authentic apps and websites from fraudulent service providers. As educators, it is crucial that we bridge the gap between the haves and the have-nots. assessing whether those in need are ready to make the leap or if it represents a significant challenge for them.

Collaborating for Inclusive and Sustainable Solutions

Governments from various countries are focused on lending to sustainable projects. For example, in agriculture, governments and private players are collaborating to finance products and technologies for farmers, creating a win-win situation for all parties involved. Similarly, we must find ways to collaborate with both governments and the private sector to offer inclusive, sustainable solutions for frontline workers.

Jeremy Crane

Group CEO Yellow Door Energy

Scaling Solar Energy for a Sustainable Future

In the first six months of 2024, we added 19 solar power projects across three countries to our operational portfolio. Our rapid execution and delivery are a testament to seamless collaboration among our team members and contractors, and the support of ambitious governmental Net Zero targets. I extend my sincere thanks to all who have worked tirelessly to accelerate the Just Transition. This is only the beginning, as we have numerous projects planned for construction throughout the rest of 2024.

To date, Yellow Door Energy's operational projects in the region have generated 693,000 megawatt-hours of clean electricity, enough to power 34,000 Dubai homes or charge 380,000 smartphones for a year. This equates to reducing carbon emissions by 484,000 metric tons, aligning with the ambitious Net Zero strategies and clean energy goals of GCC countries.

Raji Hattar

Sustainability Advisor AD Ports Group

Our sustainability plan is built around the fact that we work in a high-carbon footprint industry

One of our challenges is that we work in one of the most polluted industries on earth - we contribute a significant percentage of the world's pollution and maybe 20-25% of the carbon emissions worldwide. To be able to mitigate that, we first looked at where in our operations emissions come from and then began targeting that. In our plan, we have scope 1 and scope 2 which target our own emissions, while scope 3 aims at mitigating emissions from our subcontractors and partners such as airlines and shipping lines since we don't own planes or ships. Our first two scopes began looking at our fleet in 2008, experimenting with integrating hybrid vehicles into our fleet. Through trial and error, we ultimately implemented electric vehicles (EV's) into our commercial operations beginning in 2015. We started in Jordan and are now testing in Saudi Arabia and the UAE, where we hope to have a good number of EV's in operation by COP28 later this year.

Every employee is a sustainability officer

Our sustainability structure is quite simple. The official sustainability team is only 3 people, which means we're not a huge team even though we're involved with over 200 projects worldwide. Our approach is that, while the official sustainability team is small, every employee, all the way up to the CEO and the board, is involved with our work, and by extension everyone is part of the greater sustainability team. In that way, every employee is a sustainability officer. That's the defining feature of the culture of sustainability within our organization. The idea is that if you have a formalized, centralized sustainability team, then employees will think sustainability is only within the scope of our work and not theirs, becoming unattached. A tangible example of our approach is that our facilities management team already knows to consider renewable energy instead of a sustainability team having to mandate that to them.







Samar Al-Hameedi

Vice President, Climate Change ADNOC

ADNOC Accelerates its Net Zero Ambition to 2045

These new targets mark a new chapter in our transformational journey to a lower carbon future and builds on an established legacy as a responsible global energy provider. We've brought our net zero ambition forward to 2045 and set a goal to achieve zero methane emissions by 2030. This is all in recognition of the clear and urgent need to reduce carbon emissions across the industry. We've placed sustainability at the heart of our long-term strategy, with targeted investments in growing our low carbon solutions. This includes Investing in renewables, building a global hydrogen value chain, and deploying innovative climate technologies. In addition, we are advancing nature-based solutions and progressing our efforts of planting mangroves in the UAE. This is in support of our committed target of planting 10mn mangroves by 2030. Our investments in decarbonization go back decades. We've invested billions of dollars in decarbonization and sustainability projects since the company's inception. We've made an initial allocation of \$15bn to expedite the implementation of our decarbonization initiatives, which is also in service of achieving our long term 2045 ambition.

Achieving Zero Methane Emissions by 2030

Methane abatement is critical to mitigating the adverse effects of climate change, given its higher contribution towards global warming when compared to CO2. We've already made great strides towards eliminating flaring of natural gas across our operations. This comes from a zero routine flaring policy that we've established back in the 2000s. That was a major milestone on our pathway to eliminate flaring and reduce methane emissions. It's a fact that's already recognized by the World Bank's Global Gas Flaring Tracker report, which annually lists the UAE as having one of the lowest flaring volumes and intensities amongst oil and gas producing countries. We are proud to report that our 2022 methane emissions for our operated oil and gas assets is already 6% lower than it was in 2021. Furthermore, we've committed to a methane intensity target to not exceed 0.15% by 2025, which is already the lowest in the Middle East. Achieving zero methane emissions by 2030 will require collaboration and partnerships. We intend to leverage that through our membership in The Oil and Gas Methane Partnership 2.0. You can't manage what you can't measure. This partnership offers ADNOC and its members an understanding of our methane emissions sources, which enables us to enhance our methane monitoring and our intervention strategies through deployment of advanced technology.







May Yassin

Head of External Communications and Sustainable Business Vodafone Egypt

We must re-think how we are marketing technologies currently available

Many of the technologies currently available can be used to advance sustainability. For instance, internet of things (IoT) solutions can help reduce energy consumption. Nevertheless, they are rarely marketed based on the benefits they can have in different communities and the environment. That is where the focus should be. Moreover, companies should seek commercial benefits in a manner that is not harmful to the planet. Having courage is an important part of this. Companies may have to give up some of their profits in the short term in exchange of a more positive impact in the long term.

Sustainability needs to be embedded across different parts of organizations

We must embrace a change in corporate culture to advance sustainability. Many companies see environmental, social and governance (ESG) aspects from the reporting lenses, looking for ways to incorporate them into the scorecards by the end of the year. Nonetheless, sustainability should be embedded in day-to-day operations, making sure that commercial success does not come at the expense of the planet. For the past two years, we have been defining clear KPIs related to this purpose for every role at Vodafone Egypt. Moreover, we are actively exploring ways to support SMEs and startups to have their own sustainability journeys as well, for which we have partnered with Microsoft to explore possible pathways.

Education and continuous learning could do more to help advance sustainability

Sustainability should be incorporated into academic curriculums. It has only been a few years since we started seeing developments at university curriculums in that aspect. On top of that, there is reluctance regarding digital technologies among organizations, as many believe these solutions will eventually replace the human element. Nevertheless, digital tools can be a great support for different types of businesses and for helping to upskill and re-skill employees. Continuous learning in digital areas is a fundamental step to overcome this notion.

Vijay Bains

Chief Sustainability Officer and Group Head of Environmental, Social, and Governance, Emirates NBD

Sustainability has been around for years in some form or another

Sometimes sustainability and ESG initiatives are viewed as the realm of the young. But sustainability has been around in some form or another for many years. What's different now is that it's increasingly present in the board room, in the C-suite, and at the chairman level. It's now at the very core of how banks operate. The sustainability writing on the wall is there for many industries and we are there for them as a bank to provide sustainable finance opportunities and transition financing solutions. Banks are by nature conservative and what we seek to do is educate bankers and broader stakeholders not only on acronyms such as ESG but also on how to upskill the market broadly for a deeper incorporation of sustainability objectives.

The boardroom should take ownership of sustainability initiatives

It's important for the corporate boardroom to take ownership of sustainability initiatives and for the senior level to become involved, which acts as a halo effect for everyone else within the organization. It can also help to build in key performance indicators and metrics around sustainability so that stakeholders realize that sustainability is here and it's here to stay. Sometimes terms like sustainability and corporate social responsibility (CSR) are casually used interchangeably when in reality they refer to separate disciplines. CSR has morphed into ESG but the regulations surrounding ESG tend to revolve around climate risk modeling.

We have models to account for climate risk and environmental risk

At the organizational level, we want people who can practically deliver on sustainability programs. If someone is in risk, we want that to be also understood within the context of climate risk, sustainability risk, or environmental risk. We've already built environmental risk models for natural hazards that we haven't yet worked on enough to publicize. For example, with the earthquakes in Syria and Turkey, we had that kind of event already baked into our models. Part of the initiative isn't just creating the models in the first place, but ensuring a structure through which they can be put to good use through knowledge sharing.

Sara El Dallal

Country Director Amideast

Sara is an accomplished and results-driven professional with 17+ years of experience in education program management, marketing, and counselling. Sara completed course work for a Master of Arts in Counselling at Haigazian University in Beirut, and she holds a Bachelor of Arts in Psychology with a Minor in Public Administration from the American University of Beirut. Sara also has a professional diploma in Digital marketing in Strategy and planning.

Sara is currently serving as the AMIDEAST/UAE Country Director. She has also worked with international companies with a focus on the Education sector such as Microsoft where she utilised marketing mechanisms and working with partners and different stakeholders to enhance the digital transformation journey of different educational entities in the region.

She has focused on working on different programs targeting educators, students, and education decision makers. Sara also worked on multiple US State Department programs. She served as the EducationUSA program manager and advisor for 6 years through the AMIDEAST office in Lebanon where she worked on multiple scholarship programs in addition to managing the EducationUSA program. She has extensive experience in the MENA region with a focus on Lebanon and gulf countries. Sara led multiple programs and tasks in a high pressure and time sensitive environment. She has been recognized by the management for extraordinary client focus, detail orientation, industry knowledge, and a "does what it takes" attitude to "deliver exceptional customer service." Sara has also won several awards throughout her career from Microsoft, the US State department, US Embassy, Lebanon and the "Amideast Presidential Award". Sara has successfully built different partnerships in the education sector especially in the field of using technology in the classroom and facilitating the educational journey for students.



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Peter Zeilinger

Senior Vice President, Middle East & Africa Region OMV

Peter Zeilinger was appointed Senior Vice President, Middle East & Africa, in 2021 following 28 years at OMV where he held various technical and managerial positions in Austria, Pakistan, Romania and New Zealand.

From 2011 to 2016 he led the Australasia Region of OMV in New Zealand as Director for OMV Australia PTY and Managing Director for OMV New Zealand Ltd, at the time, the largest crude oil producer in the country.

Peter spent more than eight years with OMV Petrom in Romania, initially responsible for domestic on- and offshore oil and gas operations, and from 2016 until 2020, as an Executive Board member responsible for Exploration and Production in Romania, the Black Sea region and Kazakhstan.

During his tenure as member of the Board at OMV Petrom, the Exploration and Production division implemented a number of strategic changes, including regional growth in the Black Sea, divestments of marginal fields as well as modernisation and simplification of the production network.

Peter Zeilinger holds a Master's degree in Petroleum Engineering from the Technical University of Clausthal-Zellerfeld in Germany. **Richard Hall**





Riham El Gizy

Chief Executive Officer, Voluntary Carbon Markets

A voluntary carbon market is a visionary approach from Saudi Arabia

The Kingdom is at a pivotal moment for the country. It is changing and it is transforming. Sustainability sits at the heart of this transformation. The voluntary carbon market is one of the tools that would enable Saudi Arabia, the region, and the global south, to reduce greenhouse gas emissions. In September 2021, His Royal Highness Prince Mohammed bin Salman bin Abdulaziz, announced that Saudi Arabia had the intent to set up a voluntary carbon market. Ever since then, the Public Investment Fund (PIF) and Tadawul (Saudi Exchange) worked together on setting up that market. We have taken a great leap forward. We have anchored 15 partners who participated with us last year in the biggest auction in the history of the market, which shows that Saudi Arabia is serious about this. Most of the companies were local companies that are keen to reduce their carbon footprint.

Voluntary carbon markets may have struggled in the past, but are gaining momentum

There are mainly two challenges for voluntary carbon markets as to why they haven't made more progress in the past. The first one is the integrity and quality of the carbon credits. The second one is price discovery. A price discovery will enable scaling supply, which is very important. I suspect that most of the companies currently buy from the voluntary carbon market over the counter, which does not allow for price discovery. The reason why we are setting up an exchange in Saudi Arabia, is to allow for that price discovery. Once you know the price, then the funds start funneling into project developers. For the integrity and the guality of carbon credits, a lot of people will come and say that it's greenwashing. However, the whole idea and the beauty of the voluntary carbon market is that it is financing projects that are uneconomic without these funds. For example, why would you have a forestry project that is uneconomic? What is the financial incentive for project developers? How can they cover their costs? This is what it is all about. It is to accelerate climate action.

Richard Hall

Chief Executive Officer Dana Gas

Mr. Richard Hall graduated from Leeds University with a BSc in Chemical Engineering and spent the first 10 years of his career with Amoco, Murphy and Hess in various offshore and onshore drilling and production supervisory roles.

Mr. Hall was one of four Founders and Operations Director of Acteon Group which won the Institute of Petroleum Platinum award in 2001 for its new technology. He also formed and led a team which won the prestigious Queen's Award for Export.

Mr. Hall subsequently joined Petrofac and became the VP of Operations and Developments and General Manager in Malaysia. He was also the CEO and Co-Founder of Asia focused Nio Petroleum which opportunistically procured assets offshore Malaysia before being acquired by EnQuest in 2013 with Richard joining the Senior Management Team as Head of International Business and then Head of Major Capital Projects.

After a stint in Dubai as Chairman and CEO of a private equity backed service company, he returned to EnQuest as GM Malaysia. He was then promoted to his previous role as COO of EnQuest. Mr. Hall was recently appointed as the CEO of Dana Gas Group.



H.E. Dr. Nawal Al-Hosany

Permanent Representative of the UAE, International Renewable Energy Agency

One of the core pillars of the UAE COP Presidency will be fixing finance.

There are commitments that have been made for years and decades, that have not been fulfilled; we want developed countries to honour those. The UAE has demonstrated what financing and creating real solutions for climate mitigation can do. We are an oil and gas leader country, but we also want to maintain our leadership in the whole energy sector. As an example, we knew very early on that renewables would be part of the energy mix. Today, Masdar is one of the biggest renewable energy companies in the world, investing in the UAE and abroad. That investment in leading edge technology did not only create solutions and opportunities, but also led to the acceleration of adoption of renewables around the world. Today, we have renewable energy such as solar, cheaper than traditional energy sources. Technology will only advance if you make the right investment in research and development and in large scale solutions and projects, and by creating the financing mechanisms that make those solutions viable.

Do countries participating in COP accept that not 'one size fits all'?

We have always said that it needs to be a just transition. What works as a solution for renewables in the UAE, does not necessarily work for other countries. Geothermal energy works in Iceland but does not work for countries that don't have the same environmental conditions to pioneer those solutions. We must create a road map for different countries in different ways and we need to understand what those differences are.

Is there coordination within the energy sector on a cleaner energy pathway?

The sector has always been about competition, but when we started talking about decarbonization, it became a collaboration. We now see CEOs personally committing to decarbonization. The sector understands that it needs to collaborate on a sustainable future. GCC governments now see clean energy solutions as opportunities to create new jobs and grow their economies. We want to cut emissions, but not growth. Policy frameworks should also enable an investment environment for private companies. The private sector also can't succeed without the support of international financial institutions. And lastly, the sector should engage with society. Most companies are investing heavily in spreading awareness and educating the public on the work they are doing as part of the Energy Transition. We have a very well-informed global customer and well-informed youth nowadays, who are very selective on the sectors that they are going to engage



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Fawwaz Alshammari

SVP, Country Head of Digital Industries Siemens Saudi Arabia

Sustainability initiatives are for everyone, regardless of market or geography

We have Saudi Arabia pursuing sustainable initiatives and we have Siemens pursuing sustainable initiatives. My work at the nexus of those otherwise parallel ambitions involves combining both trajectories so that we incorporate best practices at Siemens from other markets into the Saudi market. Working towards sustainability is an endeavor that everyone can be involved with, regardless of market or geography. And in Saudi we see a big push from the government towards sustainability with clearly defined key performance indicators to move us in the right direction. Those KPIs are complemented by the private sector and by Siemens by embedding best practices we've established in other regions and bringing them to Saudi. We work with local government agencies to create use cases for emerging technologies. We partner with academic institutions so that the talent pool that we recruit from already possesses relevant skills for confronting climate change upon graduation.

It's better to build on existing initiatives rather than trying to reinvent the wheel

Collaboration is a key point in sustainability conversations and can manifest in partnerships with government, academia, or the private sector. As a big company, we also partner with small or medium enterprises since sometimes they might have better reach in their more niche markets or to capitalize on existing initiatives rather than trying to reinvent the wheel. Sometimes we see insights from our partnerships with academia that allow us to build upon what's already working in other parts of the world and introduce it locally to provide solutions to our regional needs. Of course, as a big company, we also have our own in-house research and development teams that often share their own insights with our counterparts at other organizations seeking to confront the same global sustainability challenges as us.

A few next steps can be taken to advance the push towards sustainability

For next steps, I think we need several things. Since there's already a push from the government side, it will also be important to have evolving KPIs that remain relevant to market developments. From a societal point of view, it's important to increase awareness into the kinds of sustainability issues we face regionally. And from the university perspective, which is of particular importance since Saudi is such a young nation, we'll need to focus on cultivating the skillset needed to confront climate change.

www.climatepenpal.org ¹³







Noor Balfageeh

Head of Corporate Affairs & Communications Unilever GCC

Effective sustainability communication strategies appeal to different stakeholders

Communicating sustainability issues, such as climate change or circular economy, requires of a comprehensive communication strategy that involves both internal and external stakeholders, such as employees, customers suppliers, policymakers, and partners. A major challenge to this is adapting Unilever's global message on sustainability issues to a local and regional scale. In the GCC, we have been talking about sustainability with customers and policymakers since 2010. We started by carrying out brand activation campaigns with some of our products. while trying to choose relevant causes to which local consumers would relate. Furthermore, we built strong relationships with policymakers and regulators and led various trade association and industry groups to help authorities on various sustainability issues. For instance, we recently launched a new industry group to help Saudi authorities design a waste management regulation that embeds the concept of extended producer responsibility (EPR). Bringing down Unilever's global sustainability commitments to the region

Unilever is committed to keeping plastics within the loop and phasing out plastic waste. We aim to have 100%

of our plastic packaging recycled, reusable, or compostable by 2025. To bring this goal down to the regions and countries, we follow an approach we usually refer to as 'freedom within a framework'. Bringing Unilever's messaging and commitments on sustainability down to our region requires efforts in different fronts. This is especially true in a region like the GCC, where there is still much room for improvement for waste management infrastructure. We've had to communicate actively with our suppliers to identify where we could have a greater impact to achieve this goal. One of the key stakeholders we are currently engaging with is the UAE's Ministry of Industry. We are exploring ways to source recycled plastics and reduce our carbon footprint by using clean energies in our manufacturing processes. Additionally, we have an active advocacy and lobbying branch where we aim to build unity and a common message on sustainability among industry players to address authorities.

Jaison John

Partner - Sustainability & ESG Avia & Co.

Jaison John is a trusted Strategy and Economic Advisor with over 15 years of experience driving impactful initiatives in strategic planning, sustainable growth, and advisory services for the public and private sectors. Born and raised in the Middle East, and having worked across the UK, Asia, and Africa, Jaison combines global expertise with a profound cultural understanding to address complex policy and sustainability challenges with precision and purpose.

Jaison's professional journey began in Aircraft Engineering, where he developed a foundation of technical acumen and problem-solving. This early grounding shaped his systems-driven approach, which he later applied in high-profile strategic roles. As the sole consultant for Sustainability and Climate Action at UNICEF's Gulf Area Office, Jaison spearheaded a transformative 5-pillar Climate Engagement Strategy, fostering impactful partnerships and advancing sustainable development goals for the UN Climate Change Conference, COP28. Jaison has also previously attended the Climate Change COP27 in Sharm El Sheikh, Egypt and the Biodiversity COP15 in Montreal, Canada.

At Avia & Co., Jaison established a boutique advisory firm renowned for crafting innovative strategies that seamlessly intertwine sustainability, innovation, and economic resilience. Positioned at the nexus of a consulting practice and a think tank, Avia offers a unique, interdisciplinary approach to addressing the complex challenges faced by clients across the MENASA region.

Previously, Jaison served as a Business Transformation specialist at PA Consulting, where he worked on complex transformation initiatives that redefined organizational agility. As an Assessor at the University of Cambridge Institute for Sustainability Leadership, he has worked with over 400 industry professionals, in their learning journeys to embed sustainability into core business strategy.

Jaison's work is driven by a belief that sustainability is not just a goal but a catalyst for innovation and opportunity. Whether shaping trade policies, formulating climate action strategies or enabling economic resilience, his efforts consistently create enduring value for organizations and communities worldwide. He is deeply committed to leaving a legacy of progress, where global challenges are met with practical solutions that benefit both people and the planet.

Florence Bulte

Chief Sustainability Officer Chalhoub Group

Sustainability is every employee's responsibility

As a luxury and retail family business group that has been operating in the Gulf for the past 65 years, sustainability lies at the core of our values. A pivotal moment occurred in 2014 when we became a member of the United Nations Global Compact, which made annual sustainability reporting mandatory for us. This led to the creation of the Chief Sustainability Officer role. Following the establishment of this role, we developed a sustainability strategy in 2015 that enabled us to take stock of the group's operations and conduct a materiality assessment, helping us identify specific areas of focus. Throughout these years, we have maintained a small sustainability team, as we believe that sustainability is not solely the responsibility of the CSO but of the entire organization.

Effectively communicating sustainability across departments

The starting point is reporting to the CEO. This aspect is crucial because the message needs to originate from the top. We cannot report to other business units as doing so could result in a loss of execution freedom. Another key point is to ensure the alignment of the sustainability strategy with the business strategy of the group. From an organizational perspective, having a sustainability committee in place is critical. For our organization, this takes the form of a cross-functional committee chaired by our President and including representatives from different departments such as logistics, facility management, and finance. This committee is more hands-on than advisory, which is essential in having a representative from each business unit to implement the broader sustainability strategy in every segment. Moreover, engaging with both external and internal stakeholders can help shape progressively your sustainability strategy by identifying the main priorities and areas of focus.







Shargiil Bashir

Executive Vice President & Chief Sustainability Officer First Abu Dhabi Bank

The focus on ESG has expanded among all stakeholders

ESG is not a new topic for First Abu Dhabi Bank. Our first sustainability report was created back in 2010. Since then, we have taken numerous steps to advance ESG. For instance, in 2017, we became the first bank in the MENA region to issue a green bond. Additionally, in 2019, we developed the first sustainable financing framework for banks in the region. As part of our maturing process, we have been working towards ensuring a holistic ESG strategy and identifying opportunities. Our research has shown that clients are willing to pay more for sustainable products. Similarly, key stakeholders such as shareholders and regulators have started placing a greater emphasis on sustainability aspects. As the largest bank in the country, it is crucial for us to support this journey.

ESG strategies must start from the top

It is critical for the boards of directors to make ESG a key aspect. We need to foster a culture that integrates sustainability and make sure that all members of the organization understand it. Without this clarity, it becomes challenging to obtain buy-in and execute the vision. Therefore, raising awareness about sustainability across the organization has been one of our top priorities, and we have implemented mandatory ESG training for all employees to help them become familiar with ESG.

Understanding clients to support them in their decarbonization journeys

When we committed to achieving net zero by 2050, we began focusing on the sectors in which we provide finance that have the highest greenhouse gas emissions. We started engaging with each of our clients individually to gain a better understanding of their progress in their decarbonization journey. As a result, we have observed varying levels of maturity among different clients, identified their next steps, and learned about their established plans and goals. To gather more detailed information on these aspects and explore ways to support them as their strategic financial partners, we have developed a questionnaire for all our clients.







CEO and Founder EV LAB

Expectations for COP28

To make it simple, we need to act now. There's a 40-year lag between cause and effect when it comes to climate change. We won't have the same opportunity that we had with COVID-19 to be reactive about things. We need to be proactive, and this is the opportunity we have at COP28. We need to be proactive about our messaging and we need to bring this to the same scale as we did with COVID-19. If we're talking about global challenges, pandemics are one and climate change is one. We really need to be able to communicate on a daily basis. What are the emissions of every country?' How are we reducing them? We need to be able to see that information and we need to be able to create that accountability for every country. I'm really excited to see the positive outcomes that come out of COP28.

Acceleration of impact investing

Impact investing is becoming a really important topic. Anyone that's looking for investment opportunities is increasingly looking to also make a positive impact. There are increasing amounts of venture capital that are looking at clean tech as a funding opportunity. That's exciting for startups out there. There are also a lot more classical types of funding for renewable energy projects. One of the biggest discussions for COP28 is going to be around what is good for us and how we can finance these things.

Skill sets needed for sustainability positions

When we're looking at people from our perspective, we really look at both skill sets and culture. For culture, we want people that are selfless, egoless, purpose driven, and who are looking to make an impact. That's very important to us. For skill sets, all are welcomed in the world of sustainability. There's a lot of work to do, whether it's finance. marketing, sales, or engineering. All of it is accessible. If you want to make a positive impact, sustainability is a good field that is definitely growing.

Anita Nouri

Chief Executive Officer Green Growth Planning Consultancy

As the leader and CEO Green Growth Planning Consultancy and previously GESS, Anita Nouri was integral in pioneering the First Landfill Gas to Energy Project in the region. The Al Qusais Landfill is a showcase of what can be done in a region that is still landfilling most of its waste. The project is significant in the reduction of CO2 emissions and is reducing the impact of Methane (CH4) to the atmosphere by over 300,000 tons of CO₂ equivalent registered with the UNFCCC as project #8269. Green Energy Solutions & Sustainability LLC served to show the region what can be achieved when you utilize the power that is captured in landfills and generate power and by having had a signed Emission reduction agreement with the Norwegian government to monetize the Carbon Credits GESS was able to achieve a first in the region. Green Growth Planning Consultancy was born out of what GESS had accomplished. It has established itself as a leader in the region for introducing and implementing real solutions.

Anita Nouri has been a speaker at many events, as well as being acknowledged for the work she has done, she has also attained several awards for Sustainable Smart solutions. GGPC is still targeting landfills and waste management strategies that are providing environmental solutions throughout the region by supporting the development of government legislation and regulations that will drive the Green Economy. As entrepreneurs we are proud of what we achieved and hope to keep setting standards while supporting the benchmarks in the region for alternative energy. All landfills need to be degassed and utilized for power, this is still her mission and through GGPC we will be able to support many solutions that can keep the region moving towards a more sustainable future.



Dr. Fahad A Al-Sherehy

Vice President Corporate Sustainability SABIC

Pressure is mounting for industry to adapt

There is pressure on the industry to act fast. Almost all of the countries around the globe have announced their commitments to addressing climate change. This has increased pressure from a regulation and compliance point of view. Customers are also now starting to ask about the product that they are buying and its carbon footprint. Even the financial institutes overseeing the availability of funds to support growth are now very careful when assessing projects. In addition, it's about technology, innovation, and disruption that potentially could happen and change the landscape of our industry. As a company, if you are not proactive enough, you will be behind and maybe out of the game entirely.

Next steps need for establishing voluntary carbon markets

First and foremost, regulations, standards and definitions are very important. If you can't measure it then you can't calculate it. People also have different assumptions and ways of reporting. Secondly, this is a game of collaboration across the value chain. Nobody can do it alone. Collaboration between different regions, different countries, and companies is very crucial. The last point is about time and transition. It will not help going forward if we rush things before having the right infrastructure and availability. We have to be realistic with time and setting targets, otherwise we will only see negative impact.



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Nadia Boumeziout

Head of Sustainability & Information Governance Zurich Insurance

Setting clear targets is critical to make sustainability engaging across the organization

As a multinational company, our sustainability strategy is set at a group level, and it's then cascaded down. By setting clear targets and goals, you can actually discuss the 'why' and clearly explain what we are trying to achieve. In our case, we have a framework that goes across three pillars, which are customer, planet, and people. Within those pillars, we make clear what we are trying to achieve, and then we make it relatable to every role. For example, someone who sits in finance needs to understand that they are not only looking at financial statements, but also non-financial reporting and disclosure. In marketing and communications, they need to be aware of how to communicate those new messages and ensure that we are not falling into greenwashing. One thing that works well to make sustainability relatable to everyone is having 'champions' in each department, so they can ask the right questions and translate targets to their colleagues. That also helps to embed sustainability into the entire organization.

A practical approach to education on sustainability can yield better results

We do have clear metrics to track progress in employee education programs. One thing you find is the more engaging the program is, the more takeaways people get from it. We participate in many industry working groups where you can learn from other industries and best practices that can be applied. Oftentimes, these are much more practical than any academic course could give you. I think academia is great at providing a foundational understanding, but topics such as climate change can get very technical and complicated to understand. There are different types of workshops where you can make it much more engaging and foster learning.



Loubna Zaitoun

Senior Legal Affairs Specialist UAE Ministry of Economy

Lubna, a dedicated technologist and innovator, currently serves in the Ministry of Economy in the UAE, where her work is primarily centered around advancing the circular economy and fostering new economic paradigms. With a profound background in strategy, business intelligence, and the management of intricate projects enriched by innovation and technology, Lubna excels at navigating and solving complex issues through data-driven and predictive science approaches. Over the last decade, her career has spanned a variety of sectors, where she has taken the lead in managing, directing, and implementing projects and public initiatives.

Presently, Lubna's efforts are devoted to the critical areas of circular economy, decarbonization and the exploration of new economies, underscoring her commitment to sustainability and the development of environmental economic opportunities.

"We are looking at customizing regulations, working closely with the private sector to understand the market dynamics and merge those with our policy priorities."

Faisal Durrani

Partner - Head of Research, MENA Knight Frank Middle East

Global building certifications are an opportunity

We have done some analysis around the volume of green-rated buildings in the Gulf. The UAE has about 870 green-rated buildings, which means the UAE ranks 14th globally in terms of the concentration of green buildings. A lot of those buildings are rated using local green building standards. Whilst there is nothing wrong with that, international institutional investors who are hungry for green assets want ratings that they can understand. For example, this could be LEED, BREEAM or WiredScore. Unfortunately, we don't have many of those types of assets. Therein lies the opportunity. The fact that we do not have very many internationally badged green rated assets presents an opportunity to build those assets and attract international businesses who are hunting for that space. They will pay premiums to be in green-rated buildings.

Businesses could pay a premium for green buildings

In the future, when green financing is your only option for development, vour carbon footprint will be heavily scrutinized. Demolishing and rebuilding might not always be the most financially viable route, so you will have to think about refurbishing your property. Now, refurbishing itself may not be viable physically and it might be cost prohibitive, especially if you are thinking about bringing it up to a LEED certification standard. On the other side of the equation, we know that businesses are willing to pay premiums to be in green-rated buildings. When we look at more mature markets where ESG is slightly further advanced, like the UK, we find there is a rental premium being paid by businesses that ranges from 5%-15%. They are aware of that premium. If you are occupying a building that's sustainable, it heavily promotes that company's ESG credentials. We carried out a survey of businesses around Saudi Arabia and the UAE. 75% of businesses believe that their ESG targets and their net zero commitments will impact their real estate choices in the next three years.

Manali Desai

Chief Sustainability Officer, Africa, Middle East and South Asia (AMESA), PepsiCo

Understanding each market is vital for an effective sustainability strategy

Strategy can only stay on paper and in people's computers if it's not executed the right way. It only makes sense when we have to operationalize the strategy and tailor it to our region. That's where my role and my team's role comes in. When it comes to our region of Africa and the Middle East, public policy and governments are in very different phases of evolution around sustainability policies. So then it becomes my team's role to understand market-by-market differences across all our pillars. In PepsiCo Positive (Pep+), we have five different pillars: agriculture, value chain, climate, plastics, and product. Each market is at a different level of maturity. That's where our team comes in as subject matter experts. These goals seem extremely high and ambitious, but then we break it down and look at what the glide path is year-over-year by market. We define strategies that are fit for purpose for that particular market, and then operationalize teams within those markets to actually go create impact.

Building a corporate sustainability strategy

Start with the end in mind. Always have a broad understanding of where you want the company's vision on sustainability to be and how those goals are interlinked with the business. Next, ensure that sustainability gets the right sponsorship from the top of the organization, and have peer-to-peer dialogues with all the functional leaders across the business units. Another important point is to have a cross-functional sustainability team, as you cannot drive sustainability forward in silos. In our team, we just have a direct group of five senior experts, and then we have a collaborative cross-functional team with members from different departments that take on a sustainability role.

Top three skill sets for Chief Sustainability Officers

Most of all, you have to be a strategic business leader. That's number one. Second is you need to bring in a lot of passion. Passion without substance does not go anywhere. It's important to have passion for topics, while at the same time understanding how you can drive change through technical expertise. Third is this whole transformational experience. Many of our businesses today need to step change from where they are in terms of sustainability. If you have transformational experience from the past that often helps in bringing that thinking along on what needs to step change. It could be your capabilities, ways of operating, and embedding new ways of working while bringing along the entire organization. Those are the major skill sets. It's a little bit of technical, a lot of transformation, but always strategic thinking.



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Alaa Abusiam

Chief Executive Officer, Middle East and South Asia Egis

2023 will be a big year for Middle Eastern cities, with COP28 happening in the UAE

COP events bring sustainability and the reduction of carbon emissions to the forefront of conversations in the region. As much as we are making progress, actual emissions and trends demonstrate a lot of room for improvement. 2023 will be a year under the spotlight where we are all challenged to look at specific problems for our cities. We have existing cities that need to be reinvented or reshaped to some extent. And then, we have the challenge of developing massive new cities without consuming more natural resources that are becoming more and more scarce.

A holistic approach to tackling sustainability issues within our cities

We have seen much progress happening at different layers regarding sustainable urbanism. The first layer involves the physical infrastructure and the engineers designing and implementing green infrastructure solutions. We then have the end user or citizens who need city services. A lot of innovation has happened at this level. But we have the massive digital layer in between where companies like Microsoft intervene. These stakeholders have historically worked in separate spaces, but we now see a more holistic approach.

We are still in the early stages of developing the governance of smart cities

Cities are still acting to a great extent in silos to implement the solutions that come through. A lot of work needs to be done when it comes to data governance, for example. The governance is currently heavily centralized, so involving the private sector and various stakeholders will require much more interaction and collaboration. We already saw the creation of the G20 Global Smart Cities Alliances. Still, we will need more interactions between cities to implement that governance. With COP28 taking place in the UAE, cities could use this platform as an opportunity to get together and come up with creative governance models on the sidelines of the main events.



John Roper

CEO Middle East Uniper Global Commodities SE

John Roper is CEO Middle East, at Uniper Global Commodities SE's, where he is responsible for furthering the development of Uniper's commodities and corporate portfolio in the Middle East.

He is an Energy Executive with 40 years' experience in the energy industry working for independent energy and utility companies. He has spent the last 30 years in Regional Company Management and Business Development focused on the Middle East where he has a proven track record of delivering material projects. He has held several senior positions in the International Upstream, Trading, LNG and Hydrogen businesses.

John has served as a Non-Executive Director, Chairman of the Remuneration Committee and Member of the Audit and Risk Committees of Caithness Petroleum PLC, a private Oil and Gas company in the UK and has served as a member of the Board of Directors of other offshore companies in the Middle East, North Africa and the Caspian.

John has a post graduate MSc in Geophysics and Marine Geology from University College, University of London.



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Hanan Sakr

CEO & Founder AL-ARD Sustainability Consultancy Firm

Hosting COP28: the UAE aims to be a leader in developing clean energy

Since COP26, the UAE has made significant announcements to develop clean energy, including plans to produce 25% of the global hydrogen supply. Through Masdar and joint ventures with international companies, the UAE has taken clean energy production very seriously. The country also invests globally, with over \$16 billion in clean energy investments in 70 countries. The UAE and other petrostate nations will lead the conversation of phasing down fossil fuels during this vear's COP28. Oil and gas companies particularly can be leading this transition - in terms of research and development and access to capital. As we get closer to COP28, we hope to see more deals consolidating. The PACE energy agreement signed between the UAE and the USA during Abu Dhabi Sustainability Week (ADSW) indicates what is heading our way. 2023 will be a race between the petrostate nations to develop their renewables portfolio.

The GCC, particularly the UAE and Saudi Arabia, will change the negative narrative that petrostates are the only cause of pollution and emissions at COP28. They need to better showcase the efforts that they have been doing in recent years in terms of their renewable investments and plans to develop hydrogen, for example. It will be the COP for all and action where many will showcase their expertise and new energy technologies.

There is an economic imperative to develop clean energy technologies

When we mention climate change, we always talk about negative consequences. We fail to mention the huge business cases for clean energy technologies and investments. When investing in renewables, we consider four elements: cost, energy security, environment, and loss of jobs. Firstly, renewable energy is the cheapest power source in 90% of the world. The cost of clean energy technologies has fallen by around 60 to 90% over the last 10 years. Regarding energy security, 90% of people live in countries with abundant access to renewable energy. Thirdly, the ecological footprint of renewables is 100 times lower than that of fossil fuels. Finally, the oil and gas industry tends to think that the transition will implicate the loss of jobs and skills. However, the IEA has calculated that there are more jobs in clean energy than in fossil fuels - an energy transition would mean a net gain of 22 million jobs.

Yohaan Cama ESG Lead **GEMS** Education

With over a decade of experience in the field of Sustainability and ESG, Yohaan's expertise spans across diverse sectors including the Built Environment, Infrastructure, Energy, and Metals. With a notable impact on some of the landmark projects within the region, his commitment to sustainable practices is evident through his contributions as a founding member of the Embodied Carbon Working Group and Sustainable Water Program. In recognition of his outstanding contributions, he served as a Board Member of the Emirates Green Building Council and has driven critical discussions at forums such as COP 28, C40 Cities, Architecture 2030, CIBSE, and the Dubai Chamber of Commerce. Currently, Yohaan is at the forefront of the ESG transformation at GEMS Education, embedding sustainable principles into the core of educational practices and operations.





Khuloud Hasan Al Nuwais

Chief Sustainability Officer, Emirates Foundation & Secretary General, nevma National Steering Committee

Named among the "Top 20 Most Influential Women in the UAE" by The National in 2008, Khuloud is credited with playing a pivotal role in establishing the Emirates Foundation in 2005. In 2014, she was profiled as one of UAE's Inspirational leaders and won the Emirates Woman Award for leadership by Dubai Quality Group in 2015.

As Chief Sustainability Officer at Emirates Foundation, she is responsible for developing the strategy that drives the organization to achieve its mission and monitoring its socio-economic impact. Recently, she has been tasked with developing a national initiative that tackles food loss and waste reduction across the UAE to achieve the national food security strategy goals. She has successfully engaged all sectors across the supply chain to measure and impact food waste reduction by changing current behaviors and influencing policies.

Khuloud has 26 years of experience in the private sector and philanthropy, running both operating models, grant making, and incubating new programs and initiatives. Throughout her career, she has handled different responsibilities, including thought leadership, conducting research, and advocating to influence relevant policy forums and dialogue. She has developed strong partnerships with the private sector, including local and multinational companies, over the years to improve the long-term sustainability of the foundation and integrate best practices into her work.

She recently participated as a judge for the FoodTech Challenge, a competition for innovative startups in food systems technologies. Khuloud holds a bachelor's degree in business administration with a major in Advertising Management and Marketing from Portland State University, US.







Dr. Abdullah Alkhudhiri

Vice President for Sustainability & Environment King Abdulaziz City for Science and Technology (KACST)

H.R.H Prince Mohammed bin Salman bin Abdulaziz, Crown Prince and Prime Minister of Saudi Arabia, announced the national aspirations and priorities for research, development and innovation for the next two decades. These are based on four main pillars which are: health and wellness, sustainable environment, energy and industry, and future economy. The Kingdom will become a pioneer in innovation throughout the world and also the region. The annual spending on the sector of research and development will reach 2.5% of GDP by 2040. In order to achieve this ambitious target, effort will be made to attract the best national and international talent. The Kingdom seeks to become the global model for preserving the environment and providing basic needs in terms of clean water, food, energy, and technology in a sustainable manner. Carbon Capture, Utilization, and Storage (CCUS), low cost electricity production, and hydrogen production will be focused on indepth over the next ten years. All national and international stakeholders must work together to achieve these goals.



Director of Corporate Responsibility & Sustainability Talabat

Prioritizing sustainable opportunities with conventional ones

Sustainable opportunities are very different to your conventional ones focused on the bottom line and increasing the number of users. The struggle has been working on engaging with internal stakeholders on recreating a process where sustainability opportunities are able to be prioritized and identified in a way where they're also compared to these conventional opportunities. It's very easy to go in as a sustainability lead saying, "this is what I did last month" and be very output and campaign driven. Right now, what we're trying to do is change the business internally for sustainability to be there and for it to be thriving. This is really key. I don't try to rock the boat and come up with big ideas. I try to go down to the foundational levels and say, "this is how you look at an opportunity, this is how we could be looking at it, and this is why." It's important to bring all these aspects of sustainability into the business where they fit and not have it as something completely separate or something that is there as nice PR.

The evolving role of sustainability leaders

Someone with a strategy, planning, and execution background would do really well in this role. Essentially, that's what sustainability is to me. It's not something that is separate but something that is a different approach to how you do business. It's a strategy that you implement and execute. I do think that whoever leads sustainability definitely needs to be ok with change and ambiguity. They need to be ok with doing many different things based on where the company is at in terms of maturity and how they can get better buy-in or showcase the topic in the way they want to represent it.

Corporate governance and embedding a sustainability mindset

You have to appeal to what's important to that individual team or market depending on how you're dividing up your topics. You can always start small with something like cost reduction. It's a key component of sustainability and nobody talks about it. It's not a fun one but you have to start somewhere. I don't understand why we shy away from talking more about cost reductions and sustainability especially within the business world. That's to say you're speaking the same language as the rest of the people. If you start adding all these complicated words such as mitigation and adaptation they may start to lose you.

Rohan Chopra

Regional Director, Sustainability – Europe, Middle East and Africa Johnson Controls

Drilling down sustainability strategies to every region's specifics

The implementation of sustainability strategies for large multinational organizations is a huge task, for which there is a need to follow a very structured approach across different regions. It's necessary to drill down and put in place an organized structure to implement decarbonization and sustainability strategies across different regions. We have a global Chief Sustainability Officer that leads both the external and internal strategies of the organization, which later flows down in a very structured manner to the different regions. The strategies and end goals are consistent, but their deployment is tailored to each region, which depends largely on the regulatory requirements of each country.

Financial gains can expand the sustainability buy-in within organizations

There is more to sustainability than just one person or department driving it. It is a culture that everyone within the organization needs to embed and live through. I constantly work with general managers of different segments to make sure that sustainability forms part of business decisions. There have been challenges along the way, as sustainability was initially looked at from a cost perspective, and there is always a financial metric for every initiative we carry out. Nevertheless, these are becoming easier to conduct after the realization that sustainability can have good financial returns for an organization like ours.

Sustainability is more than a tick in the box

Organizations should not just look at ESG as a tick in the box to meet compliance requirements. There are large investors that are looking for sustainable companies. It requires a proper structure and has to be discussed at the highest leadership level, regularly reviewed, and monitored. Both sustainability and ESG are very wide topics. Companies need to focus on specific pillars to which they can dedicate resources.



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Alida Saleh

Head of Sustainability JLL Middle East & Africa

Sustainable Finance: Key to the Future of Smart Cities and Green Buildings

Sustainable finance holds the key to the success of future projects in the realm of sustainability and smart cities. Investments in sustainability, through mechanisms like Green Sukuk and Green Bonds, are pivotal to realise smart cities and green building projects. Banks are increasing green financing options to support organisations that are decarbonising their real estate portfolio towards achieving net-zero commitments. With a strong push from the government and increasing awareness about climate change impacts, green finance is expected to grow significantly in the MENA region in the coming years.



Dr. Mohammad Abu Zahra

Head of MENA Region

Global CCS Institute





Ezzeddine Jradi

Chief Transformation and Business Excellence Officer Emicool

Shifting from individual CCS projects to hubs and clusters models

Today, there are 35 operational CCS projects globally, and we have recently exceeded 50 million tons of CO2 being sequestered every year. However, all these projects have taken shape independently of each other. We need to evolve CCS projects into integrated business models, which can be done through the hubs and clusters model. These can enable having multiple emission sources lined up together and using the same unified infrastructure, which can help reduce costs while providing a common site for injection and storage. Additionally, we can benefit from the economies of scale for carbon capture projects, while simplifying the regulatory process for governments who would not need to deal with individual projects scattered across different locations. This is the direction that CCS projects are moving globally.

Combining conventional technologies with R&D and piloting of second and third phase technologies

Carbon capture technologies are very similar to those used, for instance, in natural gas sweetening. These conventional technologies are provided by multiple suppliers in the market, and they need to be improved in terms of energy efficiency, cost, and better integration in a process that can be improved with second-generation solvents. On the pilot scale and R&D side, we have what we call the second and thirdgeneration technologies, which are mostly focused on solid sorbent membrane technologies and hybrid technologies like suspension systems. We need to deploy more conventional technologies to benefit from economies of scale while investing in R&D and the piloting of second and third-phase technologies. These must go hand in hand with educational programs. We need to train more engineers with a typical background in petroleum and chemical engineering, while adding CCS elements into their curriculum and fostering soft skills in terms of business models, policymaking, and regulatory processes.

Emilie Rebert

Education and Collaboration Director Goumbook

Emilie is an experienced Project Manager with 20+ years of leading projects in multi-cultural environment, with the ability to lead and gather people around the same objective, and to get tangible results. Emilie is also a Climate Fresk facilitator.

Conscious of the effects of climate change on the natural world, she wants to use her talents to the service of nature conservation.

Emilie joined Goumbook in 2024 to manage the Education pillar and she is in charge of Project Development and Collaboration Management with a focus on Education and Awareness.

"The greatest threat to our planet is the belief that someone else will save it" - Robert Swan

The first step toward sustainability for every organization

There are three questions you should ask in any organization: What? How? and Why? Sustainability has emerged as a defining factor in answering the 'why?' for stakeholders. The answer to 'why?' for most organizations has traditionally been the financial benefit to the shareholders. However, this is no longer the case. There are many new "whys?" For example, it could be energy transition, circular economy, protecting the climate, CO2 emissions, engagement, or inclusion and diversity. All of these new topics are unfamiliar. But, most importantly, they are relevant to the industry you're working in. The existing talent in your organization is already focused on the business objectives currently set based on the original 'why?' - which is basically the financial benefit for the shareholders. However, with the introduction of sustainability and the intricacies it entails, there should be an extension of knowledge to all employees. Addressing the knowledge gap and acknowledging the relevance they need to apply in their day-to-day operations is crucial. This is the first step every organization must take on their journey toward sustainability.

Personal development starts with you

I have a specific message that I would like to spread to the younger generation. Personal development is far more important right now given current circumstances and absorbing what is happening around us. Sustainability is one of them. It's not just the responsibility of a learning and development department or any HR department; it's vour personal development. Once you equip yourself with this tool. I encourage people to collaborate, come out of their silos or boxes, and ask the guestion of relevance. Why is it important and how does it apply to me? Then we can create this movement that leads to brainstorming, design thinking, and generation of new ideas. This will open the doors for even educational institutions to bring in specific programs. But I would say personal development starts with you. You are responsible for it right now. Green talent is no longer undervalued as it used to be. It is a very important skill and tool for your career path for any generation.



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Diana Sibanda

Group Head of Sustainability Coca-Cola Beverages Africa

Adapting a global strategy to the region

As we are a part of the Coca-Cola ecosystem, the sustainability strategy is set at a global level. It's then rolled out at a regional level. We develop strategies that are appropriate for our operating context to meet the global targets that have been set. This is crucial for us as an African bottler, as we have our own unique sustainability opportunities and challenges. An example of this is tackling climate change, which is a big driver globally for Coca-Cola. We are aiming to reduce our carbon emissions by 25% through 2030 using a 2015 baseline. This is quite cumbersome for a continent like Africa, where we are quite reliant on fossil fuels. We need to customize the strategy to meet that goal in 2030. First, we need to create strong partnerships with our regulatory framework and influence for us to meet those goals. Second, there is a need for education across our supply chain. We have to educate our suppliers and farmers on climate change, sustainable practices in agriculture, and engage with them on how we can facilitate their carbon emissions reduction.

Living up to the expectations of consumers

Gen Z shoppers prefer to buy sustainable brands and they are willing to spend about 10% more on average. They are the most likely to purchase based on their personal preferences, their environmental principles, and values. As we develop our strategies, we are willing to take an extra step to hear those young voices and be transparent about where we are, and what we want to do. We want to gain their trust for us to deliver what they are expecting from us as a big brand. It is not just a marketing gimmick anymore. It is something that we use to foster a culture of sustainability and social responsibility throughout our organization. We are committed to doing business the right way, and part of that is ensuring that we encompass what our consumers and customers want from us.



Francois Dao

Senior Vice President, Middle East and Africa EDF Renewables

We have no doubt that net zero is possible by 2050

As a French utilities company, EDF Renewables saw 91% of its electricity be net zero in 2021. We aspire to be a world leader in carbonfree electricity and our value proposition is very simple - to build an energy future of net-zero with electricity and other innovative solutions. We have guite a strong presence in the Middle East and Africa with about 4.8 gigawatts of renewables energies, meaning solar, wind, and battery storage. We want this mix to increase and have no doubt that net zero carbon is possible by 2050 as committed by several countries like the UAE and Oman.

Something to consider is whether clean energy is meant for domestic use or export

Everything is changing. We talk a lot about green hydrogen but we should also talk about ammonia. We're undergoing a lot of what we call green field development to develop large wind and solar plants across North Africa and the Middle East, from Morocco to Oman. Within, green field development, it takes time - sometimes years - for any project to start. Hydrogen is changing, and many markets around the world are working towards this change, including Europe, the US, and China. We welcome these market entrants. What we fail to consider sometimes is whether energy production developed in these markets is for domestic use or for export. Whether generated energy is meant for domestic markets or for international trade will shape the trajectory of the sector.

Rach El Golli

Senior Responsible Finance and Sustainability Advisor Sustainable Square

Rachel El Golli is a seasoned sustainability and ESG professional currently serving as Senior Responsible Finance and Sustainability Advisor at Sustainable Square. With over four years of experience, she leads initiatives in ESG transparency, climate change, responsible investment, and social impact, empowering organizations to achieve sustainability goals through innovative solutions like the Squarely ESG reporting tool.

Previously, Rachel held roles as Lead ESG Advisor and Sustainability and Social Impact Advisor at Sustainable Square, as well as leadership positions at AIESEC in Switzerland and Tunisia, focusing on talent management and organizational development.

She holds a bachelor's degree in Accounting and Business/ Management from Tunis Business School and brings expertise in ESG reporting, GRI standards, and sustainability-driven strategies.



Dr. Mohammed Mahmoud

Director of the Climate and Water Program Middle East Institute

Climate change will stress water supply and demand

There is a need for urgency to achieve water security. Climate change will increase Saudi Arabia's already existing challenges in accessing water supply, whether having to rely on desalination or limited groundwater supply. Water scarcity and drought will become more severe and constrain available water further.

As temperatures increase there will be more demand for water, both in urban areas and to meet agricultural requirements. This underscores the importance of developing new technologies and for enhancing the adoption of existing green technologies, which will better equip Saudi Arabia and the region to meet the challenges of climate change and its impact on water supply.

A testing laboratory for water technologies

Saudi Arabia has a unique opportunity to become a testing environment for pilot projects that can potentially take water technologies to the next level. Many countries have restrictive regulatory and policy checks in place, which delay approvals and become barriers for experimental technology tests to take place. The willingness and flexibility of the Saudi government towards trying out new technologies makes it easier for such trials to take place in the Kingdom, while the country's water-scarce environment makes it an ideal location to test water-stress technologies.

The short-term pathway: leveraging existing technologies

For example, when we think of agricultural water use, which accounts for the largest water usage in the Kingdom, we can look at ways to improve drip irrigation technologies for more efficient use of water while reducing water loss in the system. In the urban environment, we have systems in place that can transform wastewater to non-potable water standards, and water treatment technology that can convert non-potable water to drinking water standards. Given the willingness and flexibility of the Saudi government, the Kingdom has a unique opportunity to become a leader in testing and enhancing existing water solutions.



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Dr Jelena Janjusevic

Head of Accountancy, Economics and Finance, at Edinburgh Business School, Heriot-Watt University

Dr Jelena Janjusevic is Head of Accountancy, Economics and Finance, at Edinburgh Business School at Heriot-Watt University, Dubai Campus and Program Director for MSc in Management and Finance. Previously she used to teach at Montenegro Business School, University of Mediterranean in Montenegro. She teaches both UG and PG programs in finance and economics.

In her 20 years long working experience she cooperated with many subjects on national and international level (government of Montenegro officials, municipalities, social partners, foreign government officials, international institution representatives - World Bank, IFC, EBRD, USAID, UNDP, CHF, EC, etc., domestic and foreign private companies).

Additionally, she organized and attended to many conferences, seminars, workshops, press conferences; has a very good knowledge of econometrics, statistics, organizing surveys, focus groups, trend analysis, deep interviews, planning and organize trainings, etc. preparing number macroeconomic, socio-economic and financial analysis and papers she received an excellent knowledge about Montenegrin and regional development.



Asha Alexander

Executive Leader - Climate Change, GEMS Education | Principal, **GEMS Legacy School**

Accelerating the adoption of green finance is critical

Accelerating the adoption of green finance to support sustainability goals and inspire industry wide transformation is critical. Clean energy, water management, climate change, life on Earth, and life under the water are just some of the SDGs that need green finance. In the face of the pressing environmental challenges that we are seeing, the financial sector wields considerable influence and resources to accelerate the transition to a sustainable low-carbon economy. By prioritizing green finance, the financial industry can not only align with global sustainability targets, but it can also serve as a catalyst for broader transformation across sectors. This is not going to be easy sailing. There are a host of challenges to overcome on this journey. With the right enablers, infrastructure and policies in place, the region can become a leader in the adoption of green finance.

Mohannad Salam

Regional Head, Smart Sustainable Cities AtkinsRéalis

Cities should avoid adopting technologies for the sake of it

The concept of smart city was created to tackle the challenges of cities. Technology is definitely the enabler of that. By saying that, we may avoid falling into the trap of adopting technology just for the sake of it. While this might be good at an individual household level, it might not result in a smart city. Every city has its own challenges it has to tackle. We cannot call a city smart if it does not tackle those challenges as a priority, before moving into luxuries. Moreover, the concept of smart is an evolving one. You should not implement what you believe is smart and then stop, because what is smart today may become outdated in a few years. Cities need to evolve and address the challenges of what is going to happen over the next few years.

Creating smart cities is a complex effort that requires multiple collaborations

For a city to become smart, it takes a complex effort that requires multiple collaborations, involving the government, private sector, academia and experts from different areas. Today, we have many ambitions to make cities smarter, but the part related with how to do it is lagging behind. The funding to carry out these plans is also lacking in many cases. Public-private collaborations could be effective to close that gap and avoid having one sole organization dealing with such a complex task.

We need to give clear, compelling explanations of why and how are we using data

In order to get data buy-in from people, we need to tell them compelling stories that can link to their daily challenges. We need a story behind why we are gathering data, what tools we are using to analyze it and what we are planning to do with it. We need to tell people that data is being used for a specific goal, but then it's deleted. Additionally, we should aim to avoid data hunger: the more we start using technology, the more data that we will gather. Unless that is controlled through data privacy regulations, that is what will make people fear data collection.



Prof May El Barachi

Head of School of Computer Science University of Wollongong in Dubai

Prof May El Barachi is the Head of School of Computer Science at University of Wollongong in Dubai. An Egyptian Canadian Computer Scientist, and Smart Technology Expert with degrees in Telecom. Engineering, Computer Engineering, and Computer Science, Prof El Barachi possesses width and breadth of knowledge in the areas of Computer Science, IT, and Engineering. Using her knowledge and experience, she conducts large scale multi-disciplinary projects in the areas of BioTech, Smart Transportation, Smart cities, Inclusion & Innovation. With collaborators spanning the globe, and a large group of researchers under her supervision, she tackles challenging real-life problems using a combination of legacy and emerging technologies. In addition to academic collaboration, she is involved in industry collaborations with the telecom and health industries, and was able to raise more than 4 Million Dirhams in the last 5 years to support her research work. An active researcher and a published author in the area of smart technologies, Prof El Barachi has shown leadership and cultivated a research reputation of international standing over the years. During her teaching career, Prof El Barachi developed and taught a variety of IT and computer science/engineering courses which included: Distributed Systems, Information and network security, networking, mobile computing, green computing, penetration testing & ethical hacking, innovation & entrepreneurship, and emerging technologies. In her role as head of school, she spearheaded the design and development of an innovative and industry-centric master program in digital transformation. She also revamped the content of computer science majors, and developed a strategy for immersive learning and enhanced first year experience.

Prof El Barachi employs a student-centric, pragmatic teaching approach in which students are encouraged to actively engage in the teaching/ learning process, and subjects' relevance are highlighted using real life examples, systems, and case studies. Striving to motivate students and use innovative teaching techniques, Prof El Barachi puts the emphasis on offering her students a highly interactive and friendly learning environment. She oversees the participation of her students in interactive workshops and academic competitions as well as advocates the use of blended learning strategies and the involvement in interdisciplinary course projects. In addition to being a Head of School and an Associate Professor, Dr El Barachi is a consultant and certified trainer in a number of emerging technologies, including: Blockchain, Big Data, Data Science & predictive analytics, Internet of Things, and Artificial Intelligence. Prof El Barachi is also a public speaker who participates in large-scale public events and speaks about technology-related topics, such as: Digital transformation, smart cities, emerging technologies & their related opportunities, demystifying complex technologies, and professional training in alignment with the industry needs.



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Marcelo Piva

Regional Sustainability Director, Middle East and Africa Tetra Pak

The evolution of a growing sustainability practice

Tetra Pak's sustainability practice started by focusing on the environmental performance of our production sites and by ensuring we met environmental compliance. Throughout the years, the sustainability practice has evolved to cover a broader scope. Today, we go beyond recycling and circularity topics. We are now focusing on reducing carbon emissions, aiming for carbon neutrality, maximizing resources utilization, and accelerating biodiversity preservation. We understood that our stakeholders expected us to deliver in these areas. The sustainability practice has grown to having its own dedicated team.

Building a sustainability team from the ground up

It's critical to align sustainability goals with the organization's overall strategy and values. Once you reach alignment, you then need to identify key areas of impact for your business. This also must be done in line with government agendas and the regulatory landscape. Then you need to define the capabilities and skillsets needed to implement your strategy. On top of that, board members and top-level executives must make sustainability an integral part of the organization's culture. This is so it trickles down across all departments instead of it becoming the sole responsibility of just one specific department.

Identifying the skill sets needed for sustainability positions

When creating a new sustainability-related position, it's important to understand what goals the organization is trying to achieve and what your stakeholders are expecting you to deliver. For example, you might hire someone who has vast experience putting together recycling systems. However, they might not be so well equipped to deal with government stakeholders and perform an advocacy function. It's important to have a mix of operational knowledge, technological understanding, familiarity of regulations, and capacity to communicate ideas effectively. At the same time, people in these positions will also need to understand where they can add more impact to the role they are playing.



Ayub Osman

Head of Sustainability and Corporate Responsibility, Middle East and Africa, Ericsson

The sustainability practice is continuously evolving

Ericsson has been actively engaged in sustainability matters for several decades. The position of Head of Sustainability was established nearly two decades ago, following our commitments to sustainability, which can be traced back to the early 1990s when the company began integrating environmental considerations into its operations and published its first environmental report in 1993. When we set up that role globally within our group function, it was then established in the different markets where we operate, including the Middle East and Africa. A key aspect is that the practice of sustainability is continuously evolving due to regulatory requirements and the goals set in different sustainability strategies, which can affect the stage at which different companies are in their sustainability journeys.

Investing in sustainability pays off in the long run

In many cases, sustainability is perceived as additional costs rather than benefits. Nevertheless, we need to think about its long-term benefits. For instance, investing in renewable energies in your organization can involve a significant capital outlay, such as solar panels, but it ends up paying off in the long run. These benefits can come in different forms, from brand reputation to increased sales. Additionally, we are seeing a growing number of mobile network operators that are considering sustainability as a criterion in their procurement evaluations when choosing suppliers.

Which aspects should organizations consider when designing their sustainability strategies?

The first and most important aspect is to obtain leadership buy-in. If your sustainability strategy does not start from the top, it probably will not succeed. Secondly, sustainability should not be treated as a function on the side. It must become an integral part of your business to align it with your business objectives. Thirdly, make sure you are integrating sustainability into the products and services you offer. Finally, leverage collaborations with different stakeholders. For instance, at Ericsson, we have partnered with various Middle East operators, such as stc and Zain Group, to collaborate in driving our sustainability efforts towards achieving net-zero emissions.

Melda Akin

Chief Executive Officer & Founder SiriusLabs.ai by D14.Al | Forbes Top 10 Women in Tech MENA 2021

The four pillars to innovation and change

Innovation and change are supported by four key pillars. These include the environment, education, effective communication, and managing cultural differences. By focusing on these four areas, we can establish a foundation for cultivating talent in innovation and setting goals for progress. We should assess our current standing, determine where we want to be, and identify the resources and skills necessary to reach our objectives.

Increasing the share of women in tech jobs

Compared to the global average, the Middle East presents a high ratio of female students in science and engineering degrees. Nevertheless, the number of women in the tech industry dropped by 2% globally last year. We need to find ways to increase female representation in tech jobs. To address this issue, we launched Sirius Labs, a mentorship and training app. It is important to understand the needs of both companies and individuals in order to bridge the skills gap. Our goal is to build a program that connects these two parties and upskills people. On top of that, we must keep pace with all technological advancements. Technology is not static, the tools that we will use in the future to tackle climate change are changing fast. Programs like Saudi's Vision 2030 are rapidly introducing many changes. We need to provide people with the right skill sets and some guidance to benefit from the new opportunities that will emerge.

Ibrahim Al-Zu'bi

Group Chief Sustainability & ESG Officer ADNOC

We are accelerating our path towards net zero by 2045 through the integration of robust sustainability practices across our operations. Our performance is a result of the talented people who work for ADNOC, their commitment, ingenuity, and drive to progress the impact areas where we can make the biggest difference. We look forward to sharing our continued progress as we advance our net zero journey.

The decision to raise the Net Zero target to 2045 was not only because of our commitment to sustainability and climate change, as that commitment has been there for a long time, but it was also part of a strategic decision for future proofing the company and for future proofing the country as well.

To help achieve the accelerated roadmap, we have made an initial commitment to invest around \$15 billion in several aspects of decarbonization. Firstly, we are looking at electrifying our operations. The second thing was our investment in acquiring an equity stake in the Abu Dhabi Future Energy Company, Masdar, where we will seek to increase our renewables portfolio from producing around twenty gigabytes now to more than 100 gigabytes by 2030. The third area for decarbonization investment is in green hydrogen, where our target is to produce around 1 million tons of green hydrogen by 2030.







Huda Shaka

Sustainable Development City Advisor, Founder at The Green Urbanist, Director at Gehl

Different waves of smart sustainable cities in the region

In the early 2000s, there was a big focus on green buildings, certification, and energy efficiency at the building level. The next wave was around masterplans and pilot projects beyond a single building; these include ambitious sustainability projects such as Masdar City in Abu Dhabi or Msheireb in Doha. We start talking about external livability and walkability at this level. The third wave focuses on the big push around net zero, the climate emergency, and the COP events which have been taking place in the region. Today, we are around wave three or four. We are talking city-wide or nationwide; we are now focused on more than just the master plan or building levels.

Technology has been a common thread for sustainable development over the years

20 years ago, we already had all the science and technology we needed to stop climate change. Tackling sustainability issues at the city or national level is about something other than bringing in cooler toys or using bigger words. It is about committing to doing more and then actually doing it. It is fantastic that we have more technology and data. Yet, in some cases, government and private entities do not know what to do with so much data. It is tough to understand the important pieces and what should be focused and analyzed. We are missing locally relevant research to work with the professional community and policymakers in the region. We need that three-way interaction to build trust and enhance our learning to progress. Without credible and strong research from the region, and for the region, it is difficult to obtain the correct intelligence.

Governance structures in the Gulf help with the pace of change

From getting quick planning approvals for projects to the implementation of green building regulations policies overnight, the governance structures in the region come with many opportunities. The UAE, for example, has gone faster than many other countries in setting minimum requirements or regulations. But that only gets you so far. As soon as there is a minimum or legal requirement, by definition, it is no longer ambitious. You do not want to start cutting companies, entities, or individuals off the market. It is no longer just about setting minimum regulations but also about developing enablers and incentives for stakeholders.

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Dr. Yousef Alshammari

Honorary Senior Research Fellow, Imperial College London, Former Research Fellow, OPEC; Chair, CMarkits

The energy transition must balance security, cost and sustainability

We have seen over the past five years how the global temperature rise is about to reach 1.9°C under current commitments made by all the Paris Agreement signatories. That is clearly not enough to keep global warming below 1.5°C before the end of this decade. The International Energy Agency (IEA) estimates that we are on track to a 2.5°C global warming by 2030. Since the Covid-19 pandemic and the more recent invasion of Ukraine by Russia, we have seen a more ambitious acceleration towards achieving climate targets. Nevertheless, the current natural gas crisis has shifted the narrative again towards the energy security side. We are seeing gas and nuclear energy being reclassified and countries like Germany re-opening coal mines. We need an energy transition that balances security, cost, and sustainability.

Power generation and transport are the two main sectors that need to be decarbonized

Power generation is the main sector we should focus on decarbonizing, as it is where most emissions are generated. Carbon capture and sequestration will have to be the main technology to develop. Otherwise, we won't be able to achieve the 1.5°C target because renewable energies are not going to have a competitive cost compared to conventional sources within the next ten years if we don't consider subsidies or carbon prices. The other sector we need to look at is transport, which can be decarbonized through two ways. The first is by expanding electric mobility. The second is via direct combustion of fuels and direct carbon capture. We need to focus on decarbonizing these two sectors until renewables are available at a competitive cost, with solar and wind power generation the main priorities for stationary power generation in the region. Nuclear power will also have to play an important role, especially with the development of small modular reactors within the next seven to eight years.

Viridiana Bello Huitle

Director Project Management VestinGrow

Optimizing mining operations to expand circularity

The mining industry can put its focus on optimizing its operations. There are three main potential areas of action in this regard. Firstly, prioritizing the renewable energy inputs and reducing energy consumption levels. Secondly, maximizing the useful life of materials and products. Thirdly, recycling and reusing them once they reach the end of their life cycle. On top of that, we need to shift from a product-based sustainability mindset to a more holistic approach that incorporates systems thinking and digital automation. We are encouraging and deploying incentives for the mining and metals industry to make a thorough analysis and track the amount of energy they consume at every stage of their value chain.

Government visions can help develop more useful frameworks for industries

Visions are needed to develop policies and frameworks that help the industry. In Ras Al Khaimah, we are currently pursuing our 2040 Energy Efficiency and Renewable Energy Strategy. Moreover, we recently launched an energy advisory initiative to help industry players design their own strategies to reduce their consumption. It's important to provide the industry with the right framework, so they can better understand the reasons to pursue these energy efficiency goals and have incentives to commit to them. Having the right regulations in place is a fundamental step to consolidate the frameworks.

We need to expand energy optimization technologies and close the loop of renewable energy metals

Implementing technologies are essential for the measurement and optimization of entire value chains. Digital solutions will be critical to reduce the power consumption that is needed for the extraction and production phases of metals. Moreover, we need to further develop green procurement for the metal supply of renewable sources. As a consequence of the growth in renewable energy assets and infrastructure, the demand for metals is expected to ramp up over the next few years. Closing the loop for the supply of those metals will be critical to expand the circular economy in mining and metals.



Anwar Gasim

Principal Fellow, Climate and Sustainability KAPSARC

Saudi Arabia is leading the way

At COP27 His Royal Highness Prince Abdulaziz bin Salman Al Saud, the Minister of Energy, announced that the Saudi greenhouse gas credit and offsetting scheme would be launching this year. It is a domestic crediting scheme or program that is going to issue high quality, voluntary carbon credits that are compliant with Article 6 of the Paris Agreement. The scheme has been designed and tailored with methodologies for Saudi Arabia's national circumstances. It has also been designed to be inclusive. It is sector agnostic and all technologies are on the table. When you combine this with all of the developments and announcements made by the Public Investment Fund (PIF), it puts Saudi Arabia in a position to become a leader in voluntary carbon markets for the region.

Overcoming obstacles in voluntary carbon markets

Credibility is definitely a big obstacle. Recently, there have been a lot of criticisms of some of these voluntary carbon credits, particularly the ones associated with avoided deforestation. However, the market has been doing a lot. There's now a lot of best practices and codes of conduct out there to really improve environmental integrity. These have really made a big difference. Of course it's not perfect, but criticisms like pricing and making buyers worry about credibility would mean less demand. That's problematic because lowered demand puts downward pressure on prices and you lose that incentive to scale up projects in the region and around the world as well.



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Ana Hudson

Head of Sustainability Saudi Entertainment Ventures (SEVEN)

The importance of cultivating a sustainability culture

Before thinking about formal education and universities, we must incorporate sustainability education into primary and secondary school curriculums. This is already taking place, but we need to reinforce it so children grow up seeing sustainability as a part of life rather than a separate discipline. Collaboration amongst professionals within companies is also critical to foster a deeper understanding of each other's work and how different specialties can work together to be innovative and creative. Furthermore, adopting a sustainability culture can enable companies to explore synergies and partnerships with other organizations.

Top skills for future sustainability professionals

Developing leadership skills among sustainability professionals is essential to align a company's mission and value with their climate and environmental goals. Effective communication of plans is critical to gain the buy-in from everyone in the organization, as sustainability cannot be achieved by a single person. Moreover, technical skills in the areas of sustainable design, renewable energies, waste management and carbon management will be vital. Additionally, data gathering and reporting will become fundamental to evaluate the effectiveness of sustainability plans and to identify areas for improvement.



Haya Aseer

Youth Representative Global Council on SDG13: Climate Change Action Global Council on SDGs, UAE

It's critical to involve youth in climate action

Sustainability refers to the ability to meet the needs of the present without compromising the ability of future generations to meet their own needs. If this is the definition of sustainability we are considering, then it's crucial that we involve youth to ensure their representation. This is the second consecutive year that the MENA region is hosting a COP, and in this region, more than 60% of the population is comprised of people under the age of 35. If we do not involve them, we are neglecting over half of the population and missing out on numerous untapped opportunities.

The importance of access to capital for youth

One of the main challenges that youth face in their involvement in climate action is access to capital. For example, allocating a portion of R&D funds to young people conducting research and working on innovative solutions to combat the consequences of climate change would be a significant step. While focusing on upskilling youth and helping them acquire the skills for green jobs is crucial, we must not underestimate the importance of providing them with access to capital. To put this into perspective, only 0.06% of global environmental philanthropy is directed toward youth. In the Global South, that percentage is almost negligible. If we genuinely want to empower youth, then addressing the issue of funding is imperative.



Dr. Firas Al Abduwani

Director General - Renewable Energy and Hydrogen Ministry of Energy and Minerals of Oman

The region's potential for creating a supply of green hydrogen

From the Middle East perspective, we have great potential for creating a supply of green hydrogen. We need to focus on industrialization and consumption in the region. In Oman, for example, we have around 1 million tonnes of hydrogen consumed; a large portion of that goes for the petrochems and refinery aspects. Looking ahead, we need to consider hard-to-abate sectors and map out how to attract these sectors into the region as we target economic growth and diversification of revenues. Steel and green iron are two prominent examples. We are geographically placed between the East and the West, so mobility is a key industry to consider. These multiple facets of the energy sector in the Middle East show that the region can act as an energy supplier and attract the industry to the region.

Diversifying the locations of the supply chain makes sense

During the auction process at Hydrogen Oman, we kept the end product open for the developers to come in and offer what they believe will work. This was a learning experience to see how things evolved with the bidders. We implemented a few ground rules, which included: sizing the plot; including ammonia as an energy vector or a likely output; making it clear that we are focused on both the local use of hydrogen and the export market; and finally, focusing forward-looking industries to attract the hard-to-abate sectors. These are significant challenges because we have multiple moving parts. We are asking developers to not only bet on hydrogen but also to bet on moving parts of the supply chain. All these decisions are linked to multiple externalities, such as the debate between energy security versus transition or the development of carbon credits and taxes that neither they nor we control.

Policies and greater collaboration will play a significant role in net zero roadmaps

Regarding policies, we have been late in the Middle East and Africa to announce our decarbonization targets and establish adequate policies. That is related to the industrialization history of our different nations. Today, our policies differ from countries that have an equilibrium of supply potential and demand requirements. For example, the United States has a huge market for hydrogen and the potential to galvanize the supply. In the Middle East, turning our bold ambitions into executable strategies is very important. Also, we need to collaborate as a region and develop a stronger economic bloc. We need to have more regional discussions on how to expand the hydrogen market to compete with other economic blocs, like the European Union.

Dr. Imen Tebourb

Program Director MSc Financial Management & Associate Professor University of Birmingham

Dr. Tebourbi is an associate professor of Finance and Programme director of the MSc Financial Management at University of Birmingham, Dubai. She holds a PhD in Finance from Paris Dauphine University, France and an MSc in Finance from HEC, Montreal, Canada. She has an extensive teaching, research and academic leadership experience.

Prior to joining University of Birmingham, Dr. Tebourbi served in administrative roles as Associate Dean and Head of the Undergraduate programs and held academic posts in the United States, Canada, France and the UAE. She has also served as a Researcher at the Institute for Corporate Governance of Private and Public Organizations, and the Centre for Research on E-Finance, Montreal, Canada, where she led research projects on governance and risk management issues. She is a Member of the Editorial Board for the Journal of Corporate Accounting and Finance, the International Journal of Economics, Finance and Trade and the Journal of Emerging Issues in Economics, Finance and Banking. She also acts as a reviewer for several ranked journals in finance, and has earned best papers and reviewer awards for her research and reviewer work.

Dr. Tebourbi's research interests are in corporate governance, executive compensation, corporate finance, sustainability and risk management and has numerous research publications on these topics.





Walter Simpson

Managing Director CCED

Walter Simpson joined CCED as Managing Director in 2018. He is a British citizen with over 35 years of international experience across Europe, North Africa, the Middle East, India, Australia and South East Asia. Prior to joining CCED he served as Chief Executive Officer for Drillsearch Energy, a publicly listed Australian company based in Sydney.

He has a strong technical background combined with commercial acumen and excellent stakeholder skills with a track record of delivery in diverse cultural environments. He holds invaluable knowledge of complex, strategic operations and the successful delivery of oil and gas exploration and production operations.

Bringing decades of experience with him to CCED, he has streamlined the organisation to achieve ambitious upstream objectives, all the while championing national talent development and safety integrity. In 2020, he led the organisation to its 100 millionth barrel of production, a significant achievement for the organisation.

He holds an MA in Engineering Science from Oxford University and an MEng in Petroleum Engineering from Heriot-Watt University.



Badar Munir Chaudhry

Head of Energy Sector Mashreg

Significant investments in sustainable mobility can be expected

In the lead up to COP28, there are a number of industry verticals which will always attract a lot of eyes in terms of what developments are happening with respect to the energy transition. Mobility is one of those sectors. It promises to be one of the leading industries that can successfully adopt sustainable energy. Like any sector, the most important consideration at this stage in the transition is to not disproportionately burden marginalized communities. It is important to create equalities for all economies across the region. As one of the oldest privately owned banks in the UAE, we foresee that there will be significant investments in sustainable mobility for the region. Mashreq has already committed to sustainable financing of approximately \$30bn by 2030. We believe that a fair size of this commitment will go towards sustainable mobility.

Policymaking and implementation will be critical

From our point of view, the most important consideration for sustainable mobility is going to be policy making and incentivized implementation. For example, in the US, if you buy the most popular EV in that market, there is a rebate offered upfront to every purchase. That is what drives customer behavior, as a sort of a social pressure. Financial institutions will be more geared up to support initiatives, so the entire cycle starts to drive that way.



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Riyad Abou Jaoudeh

Chief Corporate Development Officer HALA

There's room for growth in the MENA climate solutions startup pipeline

One of the current challenges in the region is that we don't have a lot of climate tech startups specifically. We, as a fund, are not focused exclusively on climate tech. We're sector agnostic. However, we're intrigued by the movements in the sector and we believe in the opportunities for solving climate related challenges. We just haven't seen a strong regional pipeline in the sector just yet. We've seen several companies, related to Masdar in Abu Dhabi and several other in Saudi Arabia, tackling certain aspects of climate change in general. But I think investors are a little cautious in investing in such opportunities. What we'd love to see is more of those opportunities emerging from the MENA region.

ESG policies have been internalized into core business operations

ESG has become a big topic and our limited partners are demanding that the fund as well as the underlying investments follow certain guidelines, certain procedures. So the concept of ESG has become an important topic. It's more than a buzzword. At our firm, we have created an internal policy to assign an ESG officer. We are mandating all new investments go through an ESG checklist and questionnaire. We are also adapting these initiatives to the region and to our startups, our investments, our portfolio companies. Occasionally the ESG guidelines face some resistance, but in general their importance is recognized, especially with the governance part.

Constraints to climate financing are coming from the supply side

The limited activity in the MENA region right now for climate financing comes from constraints on the supply side. And the supply side in turn is often fed by R&D initiatives, universities, and corporate entities. Generally speaking, R&D spending in the MENA region, as well as university spending, is much lower than in Europe and the USA. So if we extrapolate this to climate solutions, this creates limited opportunities in the pipeline. If we look at investments in the MENA region from a venture capital point of view, there's much less in high-tech, R&D, and hardware compared to other regions like the US, India, and China. There's a lot of encouragement from certain government programs, university programs, and corporate programs for R&D outside the region that aren't yet available here. This may be the underlying reason as to why there ultimately are limited opportunities in the pipeline.



Richard Munang

Head of Global Environment Monitoring Systems and Early Warning UN Environment Programme (UNEP)

Can climate finance and capital markets in Africa develop independently from each other?

Climate finance and capital markets need each other. In the case of Africa, 80% of people are involved in the informal sector. That means many of them don't even have access to banking systems or capital markets. Moreover, even if we wanted to develop capital markets, would they be able to provide the right financial instruments for those most vulnerable communities to climate change? We must develop both, and we should start by reskilling the youth in these communities, so they can access finance and tap into the opportunities created.

Blended finance must take the center stage

If we want climate finance to make a meaningful impact on people's lives, blended finance needs to become the main topic of COP28. We need governments to provide seed funding to incentivize the private sector, as well as banks and microfinance institutions to lend to climate action innovators. Governments could also assess local structures that are accessible to the bulk of the population and de-risk them, such as Africa's cooperatives. That could enable the largest part of the population in the informal economy to start innovative businesses and solutions.

Government incentives should aim to make climate action an economic opportunity for populations

Countries like Cameroon and Kenya have recently put in place incentives such as tax removals to attract renewable energy investments. The removal of taxes and tax rebates for investors of clean energy solutions need to take a step further. These shouldn't only target large investments, but also reach out to the local level, especially to the youth. Over 60% of Africa's population is under the age of 25, and they need incentives to perceive climate action as a business and investment opportunity. Moreover, regulations and reforms should go beyond taxes, such as starting to integrate climate finance and entrepreneurship into school curriculums and investing in training young populations and businesses to build the right skill sets.



Suha Saad Alsaif

New Energy Director Weatherford

The issue is how to mitigate emissions impact while meeting current energy needs

All GCC countries, and Saudi Arabia in particular, are very committed to environmental issues and approach it with much openness. My point of view is that of a relatively small service company compared to major players further upstream on the service company value chain. From our side, we have created an area called ESG Impact Segment that works to address environmental issues through our technology. And while our approach is effective, I can only imagine the bigger impact it would have if it were applied at scale in much larger organizations like the Ministry of Energy or Aramco. But we're all headed in that direction because we're all committed to energy transition. We're not exiting from oil and oil continues to be a major source of energy. However, we have to be rational when it comes to emissions and consider the longterm impacts on the environment. The question is: how can we mitigate the carbon footprint on the environment that are created from our current energy needs?

The budgets are there for implementing a circular carbon economy

The concept of circular economy is one of my favorite concepts because it stems from the cradle-to-cradle idea where you see garbage as an eternal resource and design products that model human industry on nature's processes. In the energy sector, it's about harvesting waste and reincorporating it into the energy pipeline to make it reusable. We believe in it. We believe that a circular carbon economy is a huge dividend and we're looking at carbon capture, sequestration, and storage. The Ministry of Energy and Saudi Aramco have huge projects and investments in place to implement these ideas. While the whole project is at an early stage, the budgets are there and we're all moving towards that direction.







Yousif Al Zarouni

Director of Business Development **BEEAH Group**

Yousif Al Zarouni is the Director of Business Development for BEEAH's environmental consultancy. He is responsible for identifying growth opportunities and expansion to new markets, leading the sales team to ensure business growth, and nurturing new opportunities with potential partners.

Yousif's career at BEEAH began more than a decade ago when he started as a Senior Manager - Strategy. Since then, he has served in several key positions to foster business development and partnerships for BEEAH, including Head of Contracts and Procurement, Director of Contracts, Procurement and IT, Director of Procurement, Legal and Administration, and Director of Special Projects. His wide-ranging experience is invaluable to his current role as Director of Business Development, leading the growth of BEEAH's environmental consultancy by liaising with senior management. Under his leadership, BEEAH is leading benchmarking initiatives and establishing best practices with partners across industries to create an environmentally responsible and climate-positive future.

Previously, Yousif also supported BEEAH's leadership in establishing corporate governance standards and helped drive expansion and diversification efforts into different sectors. Leveraging his expertise, he conducted market analysis and forecasts that supported the formation of new ventures under BEEAH. He contributed to key organizational milestones, including introducing future-ready technologies at Sharjah Municipality, the launch of EVOTEQ – BEEAH's venture dedicated to catalyzing digital transformation, national expansion throughout the UAE, assessment of waste-to-energy innovations with Masdar which supported the development of the groundbreaking 30 MW Sharjah Waste to Energy plant, and the implementation of digitalization initiatives within BEEAH.

Anthony Berkley

Chief Development Officer (CDO) Opportunity Finance Network

Reporting and disclosing against the highest global standards is critical

The pace of change in finance in the region around sustainability has been breathtaking. We have seen a complete transformation during the last 2-5 years in this area. In the next phase of growth, trust and transparency will be foremost in the minds of many investors, especially those whom we aim to attract to the region. In this area, committing to and then being thorough in reporting and disclosing against the highest global standards is critical. There is a very clear global movement towards standardization of frameworks and reporting standards around sustainability, driven by the International Sustainability Standards Board. Currently, there is a race to determine the pace, direction, and global adoption of IFRS S1 and S2 by stock exchanges and other key market participants.

Transforming emerging markets with sustainable investments

We have called asset owners to increase their exposure in sustainability portfolios to emerging markets to 30% of assets under management, which is quite an ambitious goal. Sustainability investments in emerging markets have represented only a small portion of the global ESG flows, with the majority concentrated in Europe and North America. Asset owners and managers outside these developed markets currently account for less than 10% of these flows, indicating a huge gap and a huge opportunity. Our analysis reveals a \$5.4 trillion opportunity to align emerging markets' sustainability assets with the overall exposure to emerging markets in these large trillion-dollar portfolios. It's a big opportunity when those flows can be encouraged and can begin to accelerate. Such acceleration would provide a lot of liquidity and capital for the strongest, most bankable projects in our region, as well as for the highest-performing corporations on the stock markets and in the debt they issue. That would have an incredible impact on driving sustainable development forward in the GCC and in emerging markets.

Zoe Knight

Group Head of the HSBC Centre of Sustainable Finance Head of Climate Change, Middle East, North Africa, and Turkey HSBC Group

ESG Implementation

If you think back to the origins of ESG, driven by the UN Principles for Responsible Investment, it was very much an emphasis on looking at how companies managed their environmental, social and governance responsibilities. If you fast forward to today, it's much more about the outside in, how climate as a driver is really shaping end markets. It's shaping trade flows; it's shaping all sectors across the economy. One of the issues that the financial sector is really looking at very closely, is how those transition pathways play out in different markets and this taps into this emerging market point, because each economy is coming from a different starting point in terms of its competitive advantage in resources, its capacity, its financial firepower to be able to make changes, the willingness of the population to want to get involved on the changes that are going to be needed. We're really talking about a global economic thinking shift in the context of energy markets that are in turmoil at the moment. Investors have got a tricky job to navigate on the ESG agenda and building these coalitions and making sure that they are working in harmony with each other on this topic is important.

Developing ESG frameworks

One point to raise is that investors are really thinking about the just transition for emerging countries. What the UAE and Saudi can benefit from is innovation in financing structures and technology enablement and a high talent pool of finance professionals that can really fast forward the thinking. We know that innovation is happening at a rate of knots in all different kinds of sectors of the economy. And finance is no exception. This is about having a look at other markets, taking what works well in those markets and maybe leaving what doesn't work quite so well in other markets and coming up with the best of the best.





Bashar Al Natoor

Global Head of Islamic Finance Fitch Ratings

Islamic finance is integral to the GCC's sustainable growth Islamic finance is an integral part of the DNA of the GCC's financial sector. Around 30% of funding, and around 50% of ESG-related funding, is in sukuk. There is a crisscross between Islamic finance and sustainability. We can simplify sustainability and ESG with negative filtering and impact. On negative filtering, Islamic finance already satisfies a large portion of that as it's already embedded in its principles. The missing part is impact, and whether we have enough projects that can be put on the market to be financed, let alone having the right bankable projects. In many cases, the answer is no, as it's still developing. Islamic finance has been playing a role in financing sustainability. Five years ago, we had close to zero rated sukuk across the 57 OIC countries, where Islamic finance is active. Today, we rated around \$150 billion of outstanding sukuk, and almost 13% of that is in ESG sukuk form. It has been significantly growing in the past period, and we expect that trend to continue.

Building awareness is followed by building confidence

Having the right awareness is crucial, whether it's on Islamic finance or on sustainability. Once you have built awareness among all the stakeholders, you must build confidence, for which you need a track record. These are essential when we talk about greenwashing, lack of transparency and disclosure. One driver for this is having strong investors. We have seen many Western investors saying they want certain criteria to be met before they put their money in the region. Another driver is having governments implement regulations and requirements for financial institutions.



Husam Abdel Al

Head of Sustainable Finance Investment Banking Mashreq

Sustainable finance does not, per se, come at subsidized rates. However, many incentive schemes are offered, such as sustainabilitylinked structures with embedded pricing reductions as and when the client makes progress on its sustainability journey. In addition, due to supply and demand forces, clients are getting more competitive offers due to the scarcity of Sustainable projects."

Lydia Sanz Lozano

Masdar Future Sustainability Leader **IRENA Youth Representative**

Using your voice to advocate for change

As a young individual, I have always been interested in topics related to taking care of our planet and being more environmentally conscious. However, it wasn't until I participated in a student delegate program with the International Renewable Energy Agency (IRENA) that I realized I could use my voice to advocate for greater change. Thanks to that opportunity, I have met people with whom I now network with and continue to talk to on a day-to-day basis. When we talk about, it's not just one young person speaking out, but rather about forming bonds to create change. It's about discussing the importance of moving things forward, pushing for renewable energy use, and advocating for greater climate action.

Taking knowledge beyond the classroom to empower youth voices

Sustainability is not restricted to certain degrees or careers that only some people can aspire to. It is something that covers all disciplines, from technology to social sciences. Universities need to encourage more young people to explore courses that can tie in their academic disciplines with areas of sustainability, allowing them to see what they can achieve in their own lives. One aspect that universities need to address is ensuring that they offer courses that equip students with the skills they need. However, the most important aspect is how to take that knowledge beyond the classroom and empower young voices.

Karim Elgendy

Associate Director, Urban Sustainability Lead Buro Happold

Cities are arenas of contestation with various global agendas

The environment and sustainability agenda is driven by tackling climate change, conserving, and protecting biodiversity. There is another agenda about digitization, which is strongly supported by digital evangelists worldwide for various goals. There is an agenda about resilience and maintaining city operations. And within cities, these agendas and others manifest into factors pushing and pulling cities in different directions. Sometimes they cooperate and find synergies between them. Sometimes you can find solutions that serve multiple agendas. And in some cases, these agendas contradict each other.

The challenges of retrofitting an existing city versus developing a new one are much bigger

For example, retrofitting a city to achieve the proper density of population, which is fundamental to achieving urban sustainability, takes decades. As a result, existing cities are much more difficult to deal with and adapt to the standards we aspire to achieve. The problem is that the existing cities will still be here by 2050. New cities are much easier to deal with as they give you a blank slate. I would still be on the fence about building new cities. Because abandoning centuries of investment into existing cities carries a lot of weight. Leaving that and building somewhere else has a significant environmental footprint. The examples of new cities we have seen in the region can only be justified if the demand requires them to build new ones.

Cities need better governance to achieve greater sustainability in 2023

Cities need more power and to increase their ability to reach out directly to the residents and citizens. Except for Dubai, we do not have cities with a lot of regional governance power. There needs to be more competence with delegated authorities from the national to city level. Cities represent 70% of global emissions, but in the climate negotiations, they are observers and have no say. Mayors and city councils need to play a bigger role. The only country where we have seen this implemented to a better level is Morocco, where the decentralization laws have played a role in giving some delegated powers to local authorities. But by and large, cities are not on the table where issues related to cities are being discussed. And unfortunately, that is something that needs to be rectified to unleash the power of cities. It would support all players, planners, designers, and technology providers to achieve broader goals.





Raed Albasseet

Chief Environment and Sustainability Officer Red Sea Global

Establishing new standards for sustainable development

We are determined to establish new standards for sustainable development at the Red Sea project. We aim to be unique and hope to become a model for regenerative tourism. Therefore, we started planning for the Red Sea project in a unique fashion. We did not begin to plan with the engineers or the architects; instead, we started working with the scientists. Our first partnership was established with the King Abdullah University of Science and Technology (KAUST) to work with scientists and terrestrial and marine ecologists. Once we had enough information, we started planning and conducted the Marine Spatial Planning exercise. We brought in all the experts to limit the negative impacts the construction of the development could have on the environment. The engineers, master planners, architects, operations, and tourism experts.

Our ambition is not only to minimize the negative environmental impacts in the construction phase but, more importantly, to leave a significant and positive impact on our planet. The mandate of the board, headed by His Royal Highness, is to achieve a 30% net conservation benefit by 2040.

Integrating local communities to promote Saudi Arabia

Integrating local communities and the Saudis into the tourism offering is crucial. We are training and sponsoring locals for hospitality at the most prestigious universities in the world. During the construction phase, we have management systems in place to ensure the uptake of locals into our contractors to ensure that they are directly benefiting from the development.

Cutting-edge smart technologies are an integral part of sustainable tourism

We need skilled and reputable regional and international partners to work with us in developing cutting-edge technologies to make informed decisions in the development of the Red Sea project. Microsoft, for example, is a big player in developing smart technology applications. These applications will not only be implemented at the company level to run our operations but also will be an integral part of our future guests' experience. Smart technologies will allow our guests to learn more about their carbon footprint, the impacts of their choices, and how they play a role in advancing our regeneration ambitions.

www.climatepenpal.org 41







Senior Sustainability Strategist Saudi Aramco

The hub concept is critical to scale up CCS

Carbon capture and storage (CCS) technologies can help reduce carbon emissions across the economy while preserving existing assets. The endowment of oil and gas in the Middle East has been a critical building block for economic growth and prosperity in the region. Countries like Saudi Arabia have large concentrations of high-emitting industries such as oil and gas, petrochemicals and cement, which could maximize synergies through CCS hubs with shared CO2 transport and storage infrastructure. This hub concept is being exploited in the Eastern Province of Saudi Arabia, where the first large-scale CCS hub is being built in Jubail. It will capture 9 million tons of CO2 annually and become operational by 2027.

Partnerships sit at the core of CCS hubs

Partnerships are critical to scaling up CCS. The hub concept relies heavily on collaborations, where even small emitters can join without investing in CO2 transport and sequestration infrastructure. While the oil and gas industry has the expertise and knowledge across the entire CCS value chain, this is not the case for other industries, such as cement and power generation. These industries will need to collaborate closely with the oil and gas sector to deploy CCS and decarbonize their assets.

CCS deserves much more attention to achieve net zero

CCS is the missing element in the decarbonization puzzle and deserves much more attention from governments and industry. The Intergovernmental Panel on Climate Change (IPCC) and the International Energy Agency (IEA) have made it clear that we will not achieve netzero under any scenario without CCS technologies. Today, the global carbon capture capacity stands at around 40 million CO2 tons per year. Nevertheless, we need to reach the gigaton scale by 2030 to be on track to achieve net zero on time. The next ten years are going to be critical for this industry and the energy transition. The good news is that regions like the US are starting to put strong instruments in place to catalyze CCS, which could pose good learning opportunities for the industry.

Julia Carlow

Associate Head of Sustainability American University of Sharjah

Provide a space where young people can innovate

Sustainability has many components, but climate action is one of the most urgent. In the field of education, we have long been asking ourselves how to empower youth and teach not only knowledge but also values. It doesn't matter what you studied. Everyone has a role to play, and that's what we aim to instill in our students. We view the campus as a living lab where we can experiment, innovate, and try new things. This is where youth empowerment comes into play. You need to educate and provide information and knowledge. You also need to create a space for young people to have the freedom to experiment and try new things.

Aligning skillsets between industry and academia

We all need to keep learning, even as adults, because information is changing at a rapid pace. We need to continue learning about climate change and possible solutions. Academia has always been a catalyst for innovation. We must continue fostering that spirit and collaborating with other institutions to support one another. The UAE recently launched the Universities Climate Network earlier this year. We have been in close collaboration with other institutions in the UAE to address climate change specifically, not only for COP but also for the long term. This effort has been significant in ensuring that we create synergies and work together to have a lasting impact.



Dr. Sultan Alshareef

Sustainability Director New Murabba

Sustainability should be a stand alone function

Many initiatives have been launched since Saudi Vision 2030 was announced, such as the Saudi Green Initiative and the Circular Carbon Economy Initiative by the Ministry of Energy. The key question is how to implement all those visions at a corporate level. First of all, the company's strategy should include sustainability as a pillar of its components. We have seen many challenges with companies that did not match their business strategy with their sustainability strategy. This can set the foundation for employees to work towards their goals based on the company's sustainability targets and initiatives. Once you have this set at the highest level, then it can cascade to the operational level, where each function in the company will have their own sustainability targets. For this matter, sustainability should stand alone as a clear function in the governance and structure of the company. If it's a part of any other function, they may compromise each other. However, if you have it as a standalone function, it will have specific targets and specific mandates to follow. Then, this function can work with other departments to bring success together. It should be a separate function and, most preferably, report directly to the CEO or a C-level executive at least.

The importance of defining sustainability

One of the very essentials for sustainability in a company is to define what sustainability is, because its definition varies from one place to another, from a specific area to another region. Even though there are general statements about sustainability, when it comes to the end of the journey, the outcomes should be meeting with the global and national needs. Then, we can establish different material topics. For example, I provided consultation to a company to find the sustainability value of their project, which can go from decarbonization to enhancing forestation.







Sherif Tawfik

Chief Partnership Officer - AI & Cloud for Sovereignty - Middle East, Africa, Central Eastern Europe, and Central Asia, Microsoft

2023: the "Year of Sustainability" and COP28 as the "Energy COP"

The UAE announced the year 2023 as the "Year of Sustainability," and many experts have described COP28 as the Energy COP as it will take place in a region that is home to 50% of the largest oil and gas producers in the world. The industry is responsible for roughly 70% of the world's greenhouse gas emissions. By 2050, the UAE is expected to be 4° Celsius warmer than it is today - twice the global average rate of warming. As a result, we see a strong political will and leadership from countries like the UAE and Saudi Arabia, who are taking serious steps to transition to more sustainable forms of energy. We expect to see more announcements coming out of COP28 related to green policies, regulations, initiatives, and investment commitments. A culture of innovation is essential to create a more sustainable future. Innovative thinking and new technologies will allow us to develop new and efficient ways of producing cleaner energy. These innovative technologies include carbon capture, green hydrogen, and sustainable aviation fuel.

The role of the oil and gas industry in the energy transition will be pivotal yet evolving

Collective action is needed from different stakeholders - governments, regulators, policymakers, consumers, and tech and solutions providers. The oil and gas companies will need to navigate the challenges of rapidly changing markets as fossil fuel demand decreases and investments in renewables increase. They will need to adapt, remain competitive, and innovate in the new energy landscape. Companies like Microsoft, which have already made significant commitments to sustainability, are utilizing resources to help accelerate the decarbonization journey, transition to renewable energy, and develop a low-carbon economy. For example, we recently released our Microsoft Cloud for sustainability for emissions data and intelligence technology.



Dr. Julio Friedmann

External Associate, Center on Global Energy Policy at Columbia University SIPA and Chief Scientist, Carbon Direct

Getting Carbon Capture to the market: a matter of policy

The costs for carbon capture have dropped 50% in the past few years and they are poised to drop another 50%. Nonetheless, you need market aligning policies in order to get this to market. We have seen market aligning policies for every other kind of clean energy technology. On a cost basis, carbon capture for many applications is in fact the cheapest and cleanest way to proceed, especially in heavy industries such as steel and cement. Until those market aligning policies appear, it will be hard to get lift off.

Integrating carbon capture and storage infrastructure:

You need dedicated infrastructure in the form of pipelines, capture units in the form of conversion units and storage sites. This is something that Saudi Arabia and other countries in the gulf are taking the lead in. They are building the infrastructure that is needed to capture and store CO2, and increasingly building the infrastructure to re-use CO2. This is different than in the power sector, we already have electricity power lines, and you can just add electrons to the grid. Here you need this additional infrastructure. That will come in the form of export terminals for blue hydrogen, or chemical plants to upcycle carbon dioxide and hydrogen. Once these are built, they will de-risk investment for people who want to get into this market.

De-risking renewable energy:

When working at the loan program at the US Department of Energy, they made the first commercial loans to large scale solar projects, specifically industrial scale solar. As soon as those were built, the market de-risked those and we went from having five, that were secured by the government, to now having hundreds of these around the country and around the world. Going from zero to one is a hugely important step. That is a province of innovation and investment, as well as a guestion of policy.



Akshai Fofaria

Partner Pinsent Masons LLP

Mining corporations may have to police other players on the destination of materials

Circularity on the below ground side of mining has been focused on the processes around mining in recent years, such as ensuring that tailings are recycled, the reuse of effluents, and reduction of water usage. Some environmental campaigners have argued that is just scattering around the surface and that the focus of the debate needs to shift to the purpose of mining. Mining corporations may find themselves in a position where they will have to police other players on the destination of materials. From a regulatory perspective, that's not necessarily a huge leap. Firstly, the Kimberley Process established regimes to track the source of diamonds. We should be able to reverse engineer that to facilitate the tracking of the minerals' destination. Secondly, the idea of identifying responsible actors is not new. Markets like South Africa have a broad base of economic empowerment that grades market participants. Finally, many countries are already used to regimes that govern how and from whom you can procure. It's not too complex to shift to a type of regulation which determines to whom you are entitled to sell.

Defining the right sustainability metrics is a challenge for mining regulations

Concepts like circularity and planet positivity have impacts at different layers, which make them more complicated to measure. There are no clear ways for measuring circularity and environmental impact of mining, unlike other impacts on the climate that are more easily measured; carbon emissions can be measured with CO2 tons. Those metrics are the building blocks for regulations. I think miners will have some degree of delegated responsibility to track and measure those issues across their value chain. That will create incentives to collaborate with regulators and NGOs to better define those metrics, so we can achieve similar results to the ones seen in relation to net zero and carbon usage.

Consumers can have a role to play in the demand for smaller scale mining operations

As products become more circular, the price of virgin materials may increase. There is a role for consumers in that aspect to recognize that a culture change in terms of usage of products is required. That will likely filter into the demand for large scale mines. We may find a future that involves much smaller scale mines, which are more easily capable of creating conditions for circularity.

Dyala Sabbagh

Partner Gulf Intelligence

Dyala is a founding partner of Gulf Intelligence. Formerly Mideast Bureau Chief for Dow Jones Newswires and an international broadcast journalist who has presented the BBC and CNBC signature Middle East business programs, Dyala is a much sought after Moderator and Master of Ceremonies for government, corporate and charity events across the region, that have included special guests U.S. President Bill Clinton, Queen Rania of Jordan and Sir Bob Geldof. During her print and broadcast career, Dyala has interviewed a crosssection of business and political leaders. Dyala started her career in banking with CSFB, and moved onto media. She has a BSc. in Economics and History from the University of London and an MA in Arab Studies from the School of Foreign Service, Georgetown University, Washington D.C.





Paul Bou Chebl

Vice President of Strategy & Sustainability for Africa, Middle East & Central Asia, Alstom

Mobility is an enabler for economic development

Decarbonizing the mobility sector will take a combination of the right investments, the right innovation, and the right access that we can ultimately provide. We see mobility as an enabler for economic growth and we aim to find a balance between sustainability and development. We also want to ensure we don't burden communities in developing economies with sustainability goals and prevent them from reaching their economic potential. Partnering with Mashreq and other reputable banks will help bring the financing to allow developing countries to invest and achieve their goals.

Creating the right partnerships for the private sector to play a role

We are still young nations in the region and our development was geared towards individual transport in the past. Nevertheless, we are seeing lots of projects coming to life. For instance, the Riyadh metro, one of the largest metros in the world, is starting to evolve. Moreover, there is a lot of movement in the UAE with Etihad Rail. What I would add to that is, how do we create partnerships that are sustainable for the private sector? They need to make financial sense, and these megainfrastructure projects are typically not the most profitable. We need to explore what kind of partnerships and funding mechanisms we can unlock to accelerate these projects.

Looking beyond financial metrics to unlock further funding

When it comes to the metrics, I think we always focus on the financial ones. We should look at the acceleration of development that these projects are going to drive, especially when we have other competing industries that are also asking for funding. Once we start looking at the broader picture and the real impact of these projects, we will start seeing lots of funding getting unlocked. Moreover, banks are now focusing a lot on sustainable and green financing, for which rail has recently been included as one of the eligible sectors. We think this will also help accelerate access to funding.



Abdullatif Albitawi

Director Emirates Green Building Council

Challenges in communicating the issues around climate change

We face many challenges communicating the issues around climate change, especially when we speak with different people from different sectors and at varying levels of responsibility. The most crucial point is to recognize that how you communicate will differ from person to person. The message should be clear for all. The words we use in each message need to be at the target audience's level.

Going back to basics: defining words such as greenwashing, sustainability, or circularity

It's important to go back to the basics and make the messaging clear and direct for diverse people with various backgrounds and working in different sectors. Let's take the example of the word greenwashing. Do we all really understand what it means? Regarding greenwashing, some organizations may do it unintentionally because they lack proper knowledge and information. Some may do it intentionally because they find a way around what is required. It is the same with words such as sustainability, circularity, and climate change. Do we all have the same definitions? Are we all referring to the same information, or are we talking about different things? This is the main difficulty and challenge to tackle. We may face drawbacks or obstacles on the pathway to net zero and toward a sustainable future for the next generation.

Manal Hassan

Group Chief Sustainability Officer of Elsewedy Electric and Vice Chairman, Elsewedy Electric Foundation

Don't Overwhelm Decision Makers

Chief Sustainability Officers need to walk into any meeting knowing that sustainability is cost-centered. It is not a part that brings short-term revenue, but it's rather a long-term investment. They have to avoid making decision makers feel that sustainability comes at the expense of profitability. For example, I walked into a meeting room, and I said we need to decarbonize our manufacturing products. If you look at our profitability, 55% of our revenue comes from manufacturing and we are a top exporter, so we need to focus on sustainability because it has become an important pillar. Then, I presented what we can do over the next three years, and I put a money figure next to it. They assigned an amount of money for the first year, and other budgets for the following years. Don't overwhelm decision makers, especially if you work in countries with lots of changes, for example in the regulatory landscape.



Roland Kaeppner

Executive Director, Hydrogen and Green Fuels ENOWA (NEOM)

Enowa is Neom's energy and water partner, realizing its disruptive ambitions

Enowa, as Neom's energy and water company, was created as a Neom subsidiary. We've been part of its story from day one. We work together towards the compelling vision and ambition for Neom to become the world's first economy to be 100% powered by renewable energy. We're going to be the engine room for Neom and realize that disruptive ambition. We'll also provide Neom with water, which will be sourced from the sea, and we'll use renewable energy to do it. The remaining salt concentrate won't be dumped back into the sea but rather used as an ingredient to make other products at scale. We call preventing salt reentry into the sea 'zero liquid discharge'. On the energy side, we're making hydrogen to be used for applications in Neom around mobility, for making green steel, other green fuels, and generally to make Neom a carbon-free environment.

The clean hydrogen economy is moving from infancy to maturity

The idea to make green hydrogen the key driver for what I call the second wave of energy transition is no longer a trend. It has become a fact. If you look around the world, many economies and governments have understood that a fair amount of climate change contributors can't decarbonize through electricity. What we hope to see in 2023 is a clean hydrogen economy growing out of its infancy and starting to become a real economy. It will still depend on subsidies to get started but with a clear projection to become a market-driven economy.

Organizations have a broad toolbox for sustainability at their disposal

For organizations looking to internalize sustainability for the first time, the advice is to walk the talk. The toolbox to internalize sustainability in any organization or entity is pretty broad, so it's more about impact. An entity should consider what its motivations are, what its economic capabilities are, and determine how much of an appetite it actually has to become a first mover and to be disruptive. I get the impression that many haven't yet understood the major fact around green hydrogen – that its purpose is to stop climate change and reverse it. And that won't come for free. The profits that have been created throughout the last decades on the back of the planet's health will now have to be used to finance the energy transition.







Rayan Zahid

Chief Sustainability Officer Microsoft Central and Eastern Europe, Middle East and Africa (CEMA)

Paving the way for the next generations to advance sustainability

Youth is always at the heart of everything we do for the future. We cannot envision the future without paving the way for the younger generation. Over the past two years, we have witnessed numerous initiatives to advance sustainability under the Saudi Vision 2030. Nevertheless, there is still room for improvement in providing young talent with the necessary tools to address climate and environmental challenges. It is not just about training and educating them on the required skill sets, but also about promoting a change of mindset to approach sustainability from any perspective. This is what being a sustainability expert entails. Sustainability must be embedded in one's DNA.



Eelco van der Enden

Chief Executive Officer Global Reporting Initiative

Taking the first step towards ESG transparency reporting can be difficult

ESG just means doing good business. With ESG transparency, it takes an extra step to be open and transparent, and taking that step for the first time can be difficult. Many organizations I've dealt with that voluntarily report under our standards all went through what I call psychology of disclosure. For them, it means "If I publish this, what will be the market response? Will I get more questions that I can't answer?" The fact is that most organizations get positive responses for being transparent. British Petroleum and Anglo American, who published transparency reports under GRI standards, received praise from activist NGOs and their own internal employee work councils.

Greenwashing as on par with financial fraud

Greenwashing is one of the biggest dangers for the investor community and for business itself. Some still see ESG as a marketing gimmick and not as doing good business. If you provide stakeholders, be it investors or work councils, with false information or with inflated information to try to influence their decision-making, then it's equivalent to blowing up your balance sheet or providing inaccurate data on profitability. We call that financial fraud. To me, providing inflated data on ESG or providing information about net zero commitments that is false is on par with financial fraud and should be treated as such.

Dr. Darion Barclav

Head of Department- Cooperative Governance and Traditional Affairs Gauteng Provincial Government, Republic of South Africa

A new mobility strategy to decongest roads

Gauteng is the smallest South African province by land, but the largest by population. The growing population and the increasing number of vehicles have made traffic congestion one of our major challenges, which also cause increased pollution levels. In this context, smart mobility solutions have become a key element for the development of the province. As the economic hub of South Africa and a global cityregion, we face mounting pressure to deliver smart infrastructure and svstems.

The Gauteng Provincial Government recently launched its Smart Mobility Strategy for 2030. A key part of the new strategy is to reduce the number of vehicles on the roads and promote the use of railway, as well as to increase the number of digital mobility services. Previous strategies did not address the number of vehicles on the roads. Nonetheless, our studies suggest that not reducing the number of road vehicles could increase pollution levels and slow average travel speed to 15 kilometers per hour, in turn lengthening overall travel time. The main challenge will be to mobilize investments towards developing the railway network, which remains largely underinvested. Moreover, ensuring that all different stakeholders are involved will be a critical part of this strategy.

Effective change management underpins the adoption of smart city services

The government sector needs to adapt to the changes in the lives of its citizens to better understand their needs and identify the competitive advantages of cities and regions. Defining these can help governments effectively incorporate innovative solutions from the private sector. Effective change management within government bodies plays a key role in incorporating that innovation. For instance, when we implemented a few years ago a paperless strategy for government services, many departments lagged in digitizing their services due to a lack of proper change management. This can have a large impact on the public sector's capacity to incorporate innovative smart city solutions successfully.



Special Adviser to the Secretary General UN World Tourism Organization

Tourism in the Kingdom is not just about environmental sustainability.

It is social sustainability, economic sustainability, cultural sustainability, and, dare I say, spiritual sustainability. You cannot have tourism for tourism's sake. People can often get lost in the scale of Vision 2030 for tourism. The scale of the vision, aspirations, investment, and targets. The beauty of what the Kingdom is doing is focusing on the details. At AlUla, for example, we look at sustainability in its purest form.

People and local communities at the heart of sustainable tourism in Saudi Arabia

AlUla has become a case study for community development through tourism worldwide. However, it is not just about its history, culture, and tradition. One of the greatest beauties of AIUIa is the people. One of the critical stakeholders and sustainability partners has been the local communities. We work with them very carefully and recognize that they are the primary beneficiaries of the development. The people behind AIUIa are the ones who will keep the traditions and culture alive.

Benefits of promoting sustainable tourism in Saudi for the region

Tourism development has to be for the benefit of Arabia as a whole because Saudi has become the front window for Arabia. However, the positive impacts of tourism go far beyond those in the industry. A localized example of the positive effects of tourism is the partnership AlUla has with Piaget, one of the world's greatest luxury design houses. Piaget was brought into AlUla to work with local artisans, primarily women, in teaching them jewelry skills, working with metals and rock, and utilizing the local design.

This example illustrates that it is not just about the Kingdom investing outwards but attracting and inviting worldwide stakeholders to become partners of Saudi Arabia. It is not just the investment into tourism, but the importance of the return on investment, inspiration, and participation. That is where the real symbiotic value comes out of tourism development. It is not just about the Kingdom investing. It is the world investing in tourism in the Kingdom to benefit the region and the world







Robert Spencer

Global Lead, ESG Advisory AECOM

Deconstructing the idea of smart cities

Most people, when they think of something smart, they think about technology and they're right. There's some technology being deployed to make the city infrastructure and apparatus reactive, responsive, and predictive in terms of how the needs of the community are met effectively, of their wellbeing, of how quickly they can get across town to get to work, and how efficient and low carbon those transport systems are. And once they are at work or back at home, how efficient are their buildings? Therefore, a smart city is a net-zero city. Since the Paris Agreement, municipalities around the world have played a huge part in driving decarbonization in the net-zero agenda. That ambition is sometimes greater than you'll find at the country level in some cases.

A smart city is also a resilient city to climate change

We must keep in mind an inevitable level of climate change occurring, as we are already above one degree. And with that comes climate events that we need to be prepared for. Therefore, I think a smart city is also a resilient city. We need to consider different aspects that will enable populations to be able to not only survive, but thrive in natural hazard situations caused by climate change, such as keeping wildfires or floodings out. I think we need to work effectively with nature-based solutions as a low cost, low maintenance methodology to enhance the resilience of our cities, at the same time we are putting in the smart tech and net zero energy solutions to decarbonize our cities.

Smart cities must be clean and easy to navigate

I heard a saying that a smart city is not a place where the poor people have cars, but whether rich people use public transport. In our 20th century aspirational culture, getting a nice car is a sign that shows how well you are doing in life. However, in the net-zero smart city, you have more credibility if you're jumping on your bike or using public transport and you are having a low carbon lifestyle. And because the air is cleaner, it's nice to move around the city. We need to focus on the smart cities being attractive, clean, easy to navigate places to live.







Partner - Digital, Energy, Sustainability BCG

Digital tools can play a key role in all areas of climate action

The Paris Agreement established four main pillars to keep global warming below 1.5°C: mitigation, adaptation, resilience towards loss and damage, and finance to fund the journey to 2050 and beyond. Digital tools can have a significant impact across all these areas. For instance, digital twins can help organizations simulate possible future scenarios, such as climate impacts on supply chains or perform a cost-benefit analysis of building a coastal wall. Moreover, many early warning and action systems are currently being fueled by artificial intelligence (AI) and the internet of things (IoT), which can alert populations about possible climate impacts, such as floods or heavy rains.

What are the ABCs to set up a successful digital strategy to advance sustainability?

Defining the company's purpose is the first step and anchor for any successful digital transformation program aimed at advancing sustainability. Secondly, leadership should have a sustainability vision that cascades throughout the organization and is embedded in the scorecards of all employees. Having the right teams and performance tracking methods is vital to implementing that vision and ensuring it translates into actions. Once we have these components in place, we can start searching for solutions to address specific problems and achieve the organization's vision. Then, we can examine the potential levers that can be used and perform a cost-benefit analysis, as many technologies may not present a valid business case.

Energy companies can collaborate to attract and cultivate talent

Oil and gas and renewable energy companies can collaborate to bridge the talent gap. They can appeal to young talent by highlighting the fact that they will be the providers of green energy in the future and will help the world transition into the green economy. Climate change and artificial intelligence (AI) are the defining problems of our generation and will continue to be so for the next 50 to 100 years. Embedding this within the day-to-day vision of energy companies in the region can help attract new talent.



Business Analyst (Technology) Morgan Stanley

Embedding sustainability into education

We need to stop looking at climate change at school as a one-off opportunity like Earth Days, and then we are back to economics, back to literature, back to history. Are there ways to incorporate sustainability into the curricula for each of these topics? That's the first step in getting youth not just engaged but aware of what's at stake and what the issues are. We should start with the training and education of not just the youth themselves, but the instructors. We need to look at our instructors and see if they really value sustainability and if they're aware of how to fully incorporate it into education.

Communicating sustainability as a young person

To be taken seriously in intergenerational spaces, you need to align yourself with an organization or with your higher education institution. They can provide you with resources and a sense of legitimacy. As passionate as a person can be, it is very hard to get people to take you seriously just by going onto social media to express views, even if the message you're communicating is very important. The first step is to make sure you are confident in your skills and that you know what you are talking about. It is also crucial to make sure you are in a network that is aligned with your views and that can provide the support you need to have your voice heard.



Eng. Mohammed Mahnashi

Founder & CEO Elite Star

Sustainability has become a must

At the government level, we are talking about resilience and developing sustainable models. For example, in Saudi Arabia, Crown Prince Mohammed bin Salman launched the Saudi Green Initiative to reflect the government's ambitions. We talk about the culture, the people, and the technology. But, more importantly, we talk about how to enable a green environment for all our people.

The Saudi Green initiative is very innovative as it aims to transform a desert country into fully green - 70% of the country will be green. A project of this scale can positively impact the entire country and beyond; sectors such as tourism will see immediate results. We are not only talking about Saudi Arabia, but the initiative will also transform 30% of the Arab countries into green countries. We need the right technologies to implement such a transformative initiative. For example, we need agricultural technologies to enhance farming or AI to achieve digitalization goals. This will open new opportunities with new cities being developed. IT solutions will be critical to implement the innovative mission of the Saudi Green Initiative.

Enabling the private sector to develop sustainable economies

We are starting to implement not just the country's digital transformation but also focus on enhancing the quality of life in Saudi Arabia. The government is not just driving this transformation but also preparing the ground for the private and non-profit sectors to implement the change. We are asking the private sector to drive the economy's change and develop sustainable business models. In addition, the government is monitoring and supporting the private sector to help achieve broader sustainability goals.

The youth of Saudi Arabia is ready to implement real change from the ground

Saudi Arabia is a young country, with over 70% of the population under 30. We need to talk to the youth and listen to their thoughts. This population is extremely well educated and will drive the innovative transformations of the country. When we started working on Vision 2030, it was unclear if this transformation could happen so quickly, but many things have been achieved since the announcement of the national plan with the actions of the youth.



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Khaled Tarabieh

University Architect & Associate Professor American University in Cairo

Sustainability and daily life issues must be put at the core of new city developments

The American University in Cairo has its campus in the city of New Cairo. Located in the Cairo metropolis, the city was inaugurated in 2016 to accommodate 6 million inhabitants. Today, it faces challenges such as floodings and dusting, which have paralyzed it on various occasions. Following population growth, the road infrastructure has become too small to handle the increased volumes of traffic, which lead to higher pollution levels and more traffic congestion. Moreover, a number of green coverings have been removed to widen the roads.

The city's original goal was to expand the urban area into the desert instead of into agricultural land. Building and infrastructure construction was prioritized, whereas the daily needs of the population, such as mobility, green coverings and air pollution were not put at the core of the project. These aspects started to be dealt with once the city evolved, which is causing difficulties to come up with solutions that adjust to its built environment and legacy infrastructure.

For the construction of Egypt's New Administrative Capital, lessons were drawn from the mistakes made during the construction of New Cairo and other new city projects, which have been incorporated from early development stages. This will help the New Administrative Capital and future city developments to build resilience and be better prepared to tackle future challenges, many of them related to climate change and the environment.

Public-private collaborations are essential to build resilient communities

Public-private partnerships are a lifeline goal for cities. Local governments need capacity building, technology and educational programs to manage large cities. With the private sector being profitdriven, sometimes it can be challenging to forge those collaborations. As an educational institution, we try to facilitate the linkage creation between public and private stakeholders to serve the broader community. A key element for collaboration is the need to count with more indicators and dashboards that guide decision making. This can ensure that efforts are made in the right areas and directions. Technology affordability can be a potential area for collaboration, as many of the technological solutions that can effectively tackle city-level challenges already exist.

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There's been progress in creating a \$1 billion annual climate finance

action fund that will see contributions from 10 hydrocarbon nations

operational soon. Another key outcome is the consensus reached on

carbon markets, which could save \$240 billion annually for clean tech.

However, financing for loss and damage is still under tough negotiation.

as shareholders. This is a positive step. The fund should become

Gulmira Rzayeva

Cop29 Climate Finance

Eurasia Analytic

Founder & Managing Director



Dr. Metwalli El Noubi

Founder and Chairman EnviroTaga

We're moving towards energy transition amid a short-term energy security focus

We're all on board for an energy transition where we slowly transition from hydrocarbon energy to renewables. The targeted percentage of that transition hasn't yet been determined - whether it's 20%, 50%, or 100%, but we're headed in the direction of energy transition. The question right now is: how do we realistically achieve whatever percentage of energy transition we collectively target? Based on reports from the International Energy Agency showing energy sources and use up to 2019, we are still very far from achieving an optimal energy mix, which in turn raises the need for a more rapid energy transition. Good governance and technological innovation are both key for that transition. Additionally, right now, energy transition is a relatively smooth process compared to energy security, which is a lot more prone to short-term developments in geopolitics.

Some challenges have been overcome; others remain

Previously, the challenges we faced for scaling our ideas were identifying the price of our products and getting the appropriate investors on board. Now, those challenges have been overcome. We received support from the Prime Minister for our biogas initiatives and next on our agenda is a megawatt plant. While we're not looking to produce a biogas, but we are using biogas to produce electricity. This will be our first pilot plant and we're working collaboratively to build it out alongside experts from Switzerland and the United States.

Support from different stakeholders has been instrumental for project implementation

The government has been supportive by removing obstacles that we've faced as solutions providers that use technology coming from various sources, including myriad universities. They have helped to connect the dots. We've also received a lot of support from private investors and government banks. This support from different stakeholders is what has enabled us to build our first megawatt plant. In turn, what we're targeting with this megawatt plant is an ability to harness the incredible amounts of waste that Egypt produces daily with its 100 million population and try to use it as an energy source to advance the implementation of a truly circular economy.

Martin Lambert

Senior Research Fellow and Head of Hydrogen Research Oxford Institute for Energy Studies

Decarbonizing existing gray hydrogen can be a good starting point

According to the IEA, we currently use 90 million tons a year of hydrogen globally, which is purely gray hydrogen emitting lots of CO2. That is heating oil, refining petrochemicals and making ammonia fertilizer. It is a huge challenge already to make enough hydrogen to decarbonize all those sectors. We don't need lots of new technology to use hydrogen for that purpose. Hard-to-abate Industries like steel pose a great challenge in this regard. There are not many options to replace coal as an energy source for steel production, but using hydrogen would be an option.

Start local and build global hydrogen supply chains afterwards

Today, hydrogen is best used at a local scale due to the currently high transportation costs. For the Middle East and Africa to kickstart their hydrogen developments, they should aim for domestic developments instead of focusing only on exports. Decarbonizing refineries in the region would be a great start. Later, as hydrogen supply infrastructures are being built, export infrastructures can be developed on top of that.

Hydrogen can draw lessons from LNG and offshore wind to build its value chain

One of the key skills from fossil fuel companies is building and integrating global supply chains. That same basic business model would still apply to hydrogen and its derivatives. A colleague of mine at the Oxford Institute for Energy Studies drew parallels with LNG and offshore wind. In order to bring hydrogen at scale, we need to learn from the lessons from those two industries in terms of sharing risks along the value chain, establishing confidence in the revenue stream, whether it's funded by lenders or equity from large companies. We will need to find ways to build a robust supply chain for hydrogen. That's the actual challenge we have been struggling with, because the additional feature around low carbon hydrogen and ammonia is governments involved in that process. Nevertheless, we saw a similar experience during the early days of LNG.







Stephan Kuester

Managing Partner Startup Genome

There's a scaling gap between clean tech and other tech ecosystems

We likely already have enough innovative concepts around the world that would allow us to address the climate problems we are facing. The question now becomes – do we have the scaling capability in clean tech ecosystems that would really allow us to make a dent in the climate crisis? That's a big question mark. That's the current focus in clean tech. But the situation is improving; last year in particular saw a lot of improvements in the scaling arena, in late stage financing. But scaling in that sector is still very small compared to what we've seen in other software sectors. We should be concerned in a situation where we are unable to jointly close the scaling gap. As long as that scaling gap is there, we'll continue not having the technology impact that we want to see.

Attracting new talent and addressing investor reluctance are two important considerations

There are two fundamental things we need to look at. First, we need to do a lot more in order to activate the entrepreneurial culture in the clean tech space. We need to show how becoming an entrepreneur in climate tech solutions but also in other tech areas is a solid career plan, to show that it's the "cool" thing to do. That's the cultural piece. The other part is that we see quite a reluctance from what normally works well in younger ventures like angel investors, and other well-structured early financing groups. What we hear from many high-net worth individuals is that they are more interested in the large series A and B rounds primarily in North America and Europe, and display a reluctance to move toward very young high-risk startups in climate tech.

CONCLUSION

As we reflect on the pivotal juncture that is COP29 and its implications for the private sector, the imperative to act is more clear than ever. The outcomes of this conference are not merely statements on paper; they are the compass guiding the trajectory of stakeholder contributions towards addressing environmental challenges on a global scale for the future.

This report draws from the invaluable insights and commentary harvested from dynamic platforms created by Gulf Intelligence. These spaces have not only facilitated dialogue and communication among sustainability leaders but have also accelerated the pace of climate action. The culmination of this commentary, gathered from podcasts throughout 2023-24, serves as a testament to the collaborative spirit and shared responsibility that underpins the private sector's fight against climate change.





GII Consultancy Intelligence Publishing

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