POWERING PROGRESS. SHAPING TOMORROW.

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GULF MINING & ENERGY REVIEW

THE VOICE OF THE REGION'S MINING AND ENERGY INDUSTRY

FOCUS

FUELLING THE FUTURE

INNOVATION, INVESTMENT & SUSTAINABLE GROWTH ACROSS THE GULF

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Smart solutions transforming mining and energy

BUILDING A STRONGER, SUSTAINABLE AND **PROSPEROUS FUTURE** TOGETHER.

Editor's NOTE

The mining and energy sectors continue to stand at the centre of global economic transformation. As nations pursue energy security, industrial growth, and sustainable development, the demand for critical minerals, reliable energy infrastructure, and innovative technologies has never been greater. Across the Gulf region and beyond, governments and industry leaders are investing heavily in projects that will shape the future of mining, power generation, renewable energy, and industrial development.

This edition explores some of the most significant developments driving the sector forward. From advancements in mining technology and digital transformation to investments in renewable energy, critical minerals, and infrastructure, we examine how companies are responding to the opportunities and challenges of a rapidly evolving landscape. The increasing importance of minerals such as copper, lithium, rare earth elements, and other strategic resources is reshaping global supply chains and creating new opportunities for investment and collaboration. The growing focus on critical minerals and energy-transition resources continues to influence investment decisions across the mining and energy sectors. ([Mining South East Europe][1])

We also highlight the role of sustainability, environmental stewardship, and responsible resource development. As stakeholders place greater emphasis on ESG performance, the industry's ability to balance economic growth with environmental responsibility will remain a defining factor in long-term success. Industry discussions increasingly focus on innovation, automation, digitalisation, and sustainability throughout the mining value chain. ([Mining Magazine][2])

At GMER, our mission remains to provide timely insights, industry analysis, project updates, and expert perspectives that help decision-makers navigate this dynamic environment. Through our coverage of mining, oil and gas, power, renewables, engineering, and industrial developments, we aim to connect industry stakeholders with the information they need to identify opportunities and make informed decisions.

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GIP, L'IMAD, ADNOC and Temasek launch $30bn infrastructure platform

New partnership to target opportunities across GCC and Central Asia, with select investments in the wider MENA region.

Global Infrastructure Partners (GIP), together with Abu Dhabi's sovereign investment platform L'IMAD, Abu Dhabi National Oil Company (ADNOC) and Temasek, has announced plans to launch a major infrastructure investment platform valued at $30 billion (€25.6 billion).

The initiative will primarily target projects across the Gulf Cooperation Council (GCC) region and Central Asia, while also exploring select opportunities throughout the wider Middle East and North Africa (MENA).

The partnership aims to mobilise both equity and debt financing to support a broad range of infrastructure developments. Priority sectors include energy, transport, logistics, digital infrastructure, water systems, and waste management.

A STRATEGIC PLATFORM FOR LONG-TERM GROWTH

The platform will raise a combination of equity and debt capital to target a diversified pipeline of high-quality infrastructure opportunities.

$30bn (€25.6bn)
INVESTMENT PLATFORM

FOCUS SECTORS

ENERGY
TRANSPORTATION
LOGISTICS
DIGITAL
WATER
WASTE MANAGEMENT

STRONG PARTNERS. SHARED VISION.

BAYO OGUNLESI
Chairman and CEO, Global Infrastructure Partners (GIP)

"We are pleased to establish this partnership with L'IMAD, ADNOC and Temasek to deepen our longstanding commitment to investing across the GCC and Central Asia region.

Today, more than ever, investing in and creating best-in-class infrastructure is a critical driver of economic growth and resilience. We look forward to furthering our joint ambition to enhance innovation and economic growth."

JASSEM BU ATABA AL ZAABI
Managing Director and Group CEO, L'IMAD

"Through our partnership with GIP, ADNOC and Temasek, we are combining global investment expertise with local insight and a disciplined approach to capital deployment, focused on supporting the development of resilient assets aligned with long-term regional demand.

SULTAN AHMED AL JABER
Managing Director and Group CEO, ADNOC

"This proposed strategic partnership with GIP, L'IMAD and Temasek, targets disciplined investments across a diversified pipeline of high-quality opportunities.

It builds on ADNOC's long and successful history of working with trusted partners, leveraging its proven project delivery, infrastructure management, and financing expertise, and deep experience of deploying capital to unlock new revenue streams and create long-term value."

CHIA SONG HWEE
CEO, Temasek Global Investments

"Core-plus infrastructure is a strategic focus area for Temasek, supported by the growing global demand for modern and resilient infrastructure.

We are pleased to partner with GIP, L'IMAD and ADNOC, bringing together complementary expertise to pursue high-quality infrastructure opportunities.

This underscores our continued interest in the GCC and broader region, and our ambition to create lasting value alongside like-minded partners.

GCC RAILWAY PROJECT

GAINS MOMENTUM AS SAUDI ARABIA ADVANCES 672KM NATIONAL SECTION

A unified Gulf rail corridor moves closer to reality as Saudi Arabia Railways (SAR) launches key design consultancy tender.

The Gulf Cooperation Council (GCC) railway project has entered a new phase following the issuance of a design consultancy tender by Saudi Arabia Railways (SAR). The tender covers the Kingdom's 672km section of the planned trans-Gulf rail network, which will ultimately connect Kuwait in the north to the United Arab Emirates in the south.

The initiative is designed to strengthen regional integration, improve freight efficiency, and support long-term economic diversification across GCC member states.

> "A defining infrastructure project set to reshape trade and mobility across the Gulf region."

TENDER OVERVIEW

SAR issued the consultancy tender on 7 May, with submissions due by 30 June 2026.

The appointed consultant will be responsible for:

- Concept design development
- Preliminary design work
- Issued for Construction (IFC) documentation
- Review and upgrade of existing preliminary designs

SAUDI ARABIA ROUTE ALIGNMENT

The Saudi section will run from:

- **Al-Khafji** (Northern border with Kuwait)
- **Al-Batha** (Southern border with the UAE)

Total length: 672km

This segment forms one of the largest and most strategic components of the GCC-wide rail network.

REGIONAL CONTEXT

The GCC railway is part of a broader 2,186km integrated network connecting all six GCC states. Once completed, it is expected to significantly transform:

- Passenger mobility across Gulf cities
- Cross-border freight logistics
- Regional supply chain efficiency

RENEWED MOMENTUM

The project gained renewed traction following the Al-Ula Declaration in 2021, which reinforced regional cooperation and revived major infrastructure initiatives across GCC countries.

Saudi Arabia's rail line will directly interface with Kuwait's National Rail Road (KNRR), strengthening north-south connectivity across the region.

GCC RAILWAY: A TRANSFORMATIONAL GULF TRANSPORT CORRIDOR

The GCC railway is positioned to become one of the most significant infrastructure developments in the Middle East, reshaping transport, logistics, and economic integration across member states.

NETWORK INTEGRATION ACROSS THE GULF

The masterplan connects all GCC countries through a continuous rail system:

- Kuwait → Saudi Arabia → Bahrain (via causeway)
- Saudi Arabia → Qatar
- UAE → Oman (via Sohar corridor)

Each country contributes a key segment to the unified network.

ROUTE BREAKDOWN BY COUNTRY

UAE	684km
SAUDI ARABIA	672km
OMAN	306km
QATAR	283km
KUWAIT	145km
BABRAIN	36km

TOTAL NETWORK LENGTH: 2,186km

OPERATIONAL PERFORMANCE

The railway will support both passenger and freight services:

- Passenger trains: **up to 220km/h**
- Freight trains: **80–120km/h**

These specifications are expected to significantly reduce travel and cargo transit times across the region.

ECONOMIC AND STRATEGIC IMPACT

The GCC railway supports key regional priorities:

- **Economic diversification** under Saudi Vision 2030
- **Improved logistics efficiency** across ports and industrial hubs
- **Reduced highway congestion**
- **Enhanced tourism and labour mobility**

Cities such as Kuwait City, Dammam, Doha, Abu Dhabi, Dubai, and Muscat will be connected through an integrated rail network.

> "One of the most transformative transport infrastructure projects in the Middle East."

PROJECT OUTLOOK

Despite earlier delays, strong economic conditions, rising energy revenues, and improved regional coordination have accelerated project progress.

Once completed, the GCC railway will stand as a cornerstone of regional integration and one of the Gulf's most ambitious infrastructure achievements.

GCC RAILWAY
PROJECT FACT SHEET

PROJECT	GCC Railway – Saudi Arabia Section
LENGTH (SAUDI)	672km
TOTAL GCC NETWORK	2,186km
STATUS	Design consultancy tender
TENDER DEADLINE	30 June 2026
SPEED (PASSENGER)	220km/h
SPEED (FREIGHT)	80–120km/h
ESTIMATED VALUE	> US$15 billion
LEAD AGENCY	Saudi Arabia Railways (SAR)

KEY OBJECTIVE

To create a seamless, high-capacity rail corridor that enhances trade, mobility, and economic integration across the GCC region.

- Strengthening Regional Integration
- Improving Freight Efficiency
- Driving Long-Term Economic Growth
- Connecting People and Opportunities

Gulf Capital Concentration
Builds a Long-Term Infrastructure Model in Pakistan

AT THE CENTRE OF THIS APPROACH IS
Sheikh Ahmed Dalmook Al Maktoum
THROUGH
INMĀ EMIRATES HOLDINGS

Gulf private infrastructure capital is increasingly concentrated in Pakistan, spanning ports, renewable energy, digital education, and premium real estate. Rather than fragmented investments across multiple countries, this model reflects a deliberate strategy of deep, multi-sector commitment within a single national market.

At the centre of this approach is Sheikh Ahmed Dalmook Al Maktoum, through Inmā Emirates Holdings. His Pakistan portfolio integrates long-term infrastructure assets designed to address structural gaps in the economy while building sustained bilateral economic ties.

1 PORT INFRASTRUCTURE: A 50-YEAR HORIZON

A flagship component is a 50-year concession at Karachi Port, developed in partnership with Abu Dhabi Ports.

The project focuses on upgrading berths, deepening capacity, improving cargo handling systems, and integrating modern logistics operations at East Wharf.

Karachi Port handles the majority of Pakistan's maritime trade, making it a critical economic gateway.

The long-term concession introduces phased modernization, ensuring continuous upgrades in infrastructure, operations, and workforce capacity over decades rather than short project cycles.

2 RENEWABLE ENERGY EXPANSION

Pakistan's energy deficit remains a major constraint on industrial growth and economic stability.

A 15-year renewable energy program is underway, targeting approximately 1,200 megawatts of solar and wind generation.

The model goes beyond construction, incorporating workforce training, local supplier development, and long-term operations capacity.

This approach ensures that as new capacity comes online, domestic technical expertise grows alongside it, supporting sustained system reliability rather than one-off project delivery.

3 DIGITAL EDUCATION TRANSFORMATION

In the education sector, Smart Classroom deployment is being implemented in partnership with Huawei.

The initiative combines hardware installation with teacher training to strengthen digital learning capacity in schools.

The objective is not only to provide access to technology, but to build the instructional skills required to use it effectively.

This dual approach addresses Pakistan's persistent gap between equipment availability and educational outcomes, particularly in underserved regions.

4 REAL ESTATE AND LONG-TERM PRESENCE

In parallel, ultra-high-end real estate developments in Karachi's Defence Housing Authority reinforce long-term investor presence and confidence in the market.

These projects serve as commercial anchors, complementing infrastructure investments with private-sector economic activity.

A LONG-TERM BILATERAL INVESTMENT CASE

Pakistan represents a test case for whether sovereign-anchored Gulf capital can transition from transactional deal-making to institutional development. **Through long-horizon commitments and cross-sector investment**, Inmā Emirates Holdings and its partners are positioning infrastructure not as standalone assets, but as interconnected systems shaping long-term economic transformation.

SECTOR INTEGRATION AS A RISK STRATEGY

A defining feature of this model is sectoral density. Instead of spreading exposure across multiple countries, investments are concentrated within Pakistan across interconnected systems—ports, energy, education, and real estate.

PORTS
Efficient ports enable trade flow and support energy & industrial logistics.

ENERGY
Reliable energy stability powers industry and digital systems.

INTERCONNECTED INVESTMENTS. COMPOUNDED IMPACT.

EDUCATION
Digital education builds human capital and drives future productivity.

REAL ESTATE
Real estate anchors long-term investor confidence and economic activity.

OPERATIONAL INTERDEPENDENCE

Port efficiency affects energy logistics, energy stability supports digital systems, and infrastructure reliability reinforces broader economic activity.

HIGH-IMPACT ENVIRONMENT

Pakistan's structural challenges—ranging from energy shortages and port congestion to limited digital infrastructure—make it a high-impact environment for this type of integrated investment.

RISK MANAGEMENT THROUGH COMMITMENT

Political volatility and currency fluctuations are managed through long-duration commitments and institutional partnerships.

LONG-TERM HORIZON
50-year port concession and 15-year energy program ensure sustained impact beyond political cycles.

WORKFORCE & LOCAL VALUE
Focus on training, local suppliers, and capacity building to create lasting national capabilities and jobs.

SUSTAINABLE GROWTH
Clean energy, modern logistics, digital learning, and quality infrastructure drive inclusive and resilient growth.

BILATERAL STRENGTH
Deep, multi-sector commitment strengthens Pakistan–UAE economic ties and long-term strategic alignment.

Through long-horizon commitments and cross-sector investment, Gulf capital is building not just projects, but a **self-reinforcing infrastructure ecosystem**—creating lasting impact for Pakistan and **stronger ties for generations to come.**

GREEN LOGISTICS DRIVING AFRICA'S TRADE FUTURE

As Africa continues expanding trade through initiatives such as the African Continental Free Trade Area (AfCFTA), sustainability is becoming a major priority within the logistics industry.

While economic growth and cross-border commerce remain key goals, logistics providers are increasingly focused on reducing environmental impact and building more resilient supply chains.

A CONTINENT IN MOTION

TOWARD SUSTAINABLE LOGISTICS

This Earth Day places renewed attention on how the sector can reduce carbon emissions while supporting long-term economic development across the continent. Logistics companies are now rethinking transportation, packaging, and delivery systems to improve efficiency and create more sustainable operations.

In South Africa, global companies such as FedEx are leading the way by introducing greener logistics solutions and sharing international best practices. One of the biggest focus areas is transportation, which remains a significant contributor to national carbon emissions due to the country's heavy dependence on road freight.

To address this challenge, logistics operators are investing in smarter fleet management systems, route optimisation technology, and data-driven tools that help reduce unnecessary trips and lower fuel consumption. FedEx has also expanded the use of electric delivery vehicles across key centres including Johannesburg, Durban, and Cape Town as part of its long-term sustainability strategy.

Packaging is another area undergoing significant change. Many logistics companies are moving toward lightweight, recyclable, and reusable materials to reduce waste and minimise environmental impact. Reducing excessive packaging not only lowers landfill waste but also decreases shipment weight, helping to cut transport emissions.

Technology is also playing an important role in greener logistics. Carbon tracking tools and digital monitoring systems are helping businesses better understand and manage their emissions across supply chains. These innovations support more informed and environmentally responsible shipping decisions.

As Africa's trade network continues to grow, sustainable logistics practices will become increasingly important in strengthening the continent's competitiveness, supporting economic resilience, and creating a cleaner future for communities and businesses alike.

> "SUSTAINABLE LOGISTICS IS NOT JUST A TREND– IT IS THE FUTURE OF TRADE IN AFRICA."

Green Logistics Driving Africa's Trade Future

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Australian Miner Expands Uranium Exploration Portfolio in Zambia

An Australian mining company is expanding its uranium footprint in Zambia through increased exploration activities and the acquisition of additional uranium assets. The expansion reflects growing international interest in uranium as countries around the world seek reliable energy sources to support the transition to lower-carbon economies.

The company's flagship uranium project has seen encouraging progress, with ongoing drilling programmes resulting in a significant increase in estimated uranium resources. These developments have enhanced the project's long-term potential and reinforced confidence in its future viability.

To further strengthen its position in the country, the company has secured access to additional exploration areas, creating opportunities for future resource growth and new discoveries. Zambia's favourable mining environment and abundant mineral resources continue to attract investment from international mining firms looking to expand their operations in Africa.

The expansion is expected to contribute positively to Zambia's economy through job creation, skills development, infrastructure investment, and increased mining activity. As exploration and development efforts continue, the company aims to play a greater role in the country's mining sector while helping to position Zambia as an emerging uranium producer on the global stage.

electra mining africa 2026

Southern Africa's Biggest | SINCE 1972

INNOVATION, AUTOMATION AND THE FUTURE OF INDUSTRY

Electra Mining Africa 2026 is set to showcase the latest innovations transforming the mining, manufacturing, industrial and automation sectors across Southern Africa.

From intelligent automation systems and digital monitoring technologies to advanced mining equipment and AI-powered safety solutions, the exhibition will highlight how technology is reshaping operations for greater productivity, efficiency and safety.

As industries continue to adopt mechanisation, automation and digitisation, companies are increasingly investing in technologies that deliver practical, cost-effective solutions for real operational challenges. Visitors to the show will experience firsthand how these innovations are improving industrial performance while creating opportunities for skills development, competitiveness and regional growth.

The exhibition will feature a broad range of technologies including CNC simulation software, automated project tracking systems, digitally-enabled power solutions, precision motion technologies and advanced sensing systems designed for harsh industrial and mining environments. Intelligent monitoring systems and real-time data solutions are becoming increasingly important as automated operations continue to expand across the sector.

Electra Mining Africa 2026 will also showcase the latest developments in collision avoidance technologies, AI-enabled safety systems and automated fire suppression systems designed specifically for modern mining and industrial applications. These solutions are helping industries improve workplace safety while ensuring operational continuity and resilience.

With over 1000 exhibitors expected, the 2026 event will be the biggest edition yet, offering visitors access to world-class innovations, suppliers and expertise all under one roof.

EXPANDED OUTDOOR EXHIBITION EXPERIENCE

Electra Mining Africa 2026 introduces the new Orange Zone outdoor exhibition area at the Expo Centre, Johannesburg.

Showcasing large-scale machinery, heavy equipment, lifting technologies and industrial vehicles in a dynamic environment.

Greater participation from original equipment manufacturers and more opportunities for networking, demonstrations and business engagement.

International exhibitors and country pavilions bring global innovations to the South African market.

Technical workshops, seminars and knowledge-sharing sessions support industry growth and collaboration.

DRIVING INNOVATION. IMPROVING PRODUCTIVITY. BUILDING THE FUTURE.

Electra Mining Africa 2026 brings together technology, industry and opportunity to connect, innovate and progress.

EVENT DETAILS

VENUE Expo Centre, Nasrec, Johannesburg, South Africa

DATES 7 – 11 September 2026 | 9:00 – 17:00 Daily

WEBSITE www.electramining.co.za

BE PART OF AFRICA'S LARGEST INDUSTRY GATHERING.

REGISTER TO VISIT TODAY!

Local manufacturing showcased at Electra Mining Africa

The South African manufacturing sector currently produces below installed capacity levels, resulting in manufacturing firms not benefiting from economies of scale and competitive advantages that they would enjoy if they were operating at manufacturing capacity. Low demand, stagnant domestic growth, competition from imports and high input costs are all contributing to the strain on the manufacturing sectors growth prospects.

Despite these challenges, local manufacturers possess world-class technical and problem-solving capabilities. The extensive and well-developed human resources and know-how within the industry make it an invaluable key economic enabler of growth and job creation in the country as it supports broad employment and skills development goals. Also, local manufacturing can ramp up capacity whenever strategic opportunities arise, leading to fast turnaround times and market flexibility.

Local manufacturers will be on the look-out for new business opportunities and strategic industry partnerships at this year's Electra Mining Africa and co-located Local Southern African Manufacturing Expo taking place later this year. The exhibition provides an ideal opportunity for local manufacturing companies to build relationships and source new clients as they look for ways to ramp up manufacturing capacity and increase competitiveness. "Local manufacturing firms will take advantage of the marketing opportunity to generate business leads and develop industry partnerships, which have been shown to boost sales for the 12-18 months following the event," says Charlene Hefer, Portfolio Director at Montgomery Group Africa, organisers of the show.

Local manufacturers represented at the show include suppliers from across the mining, industrial, electrical, power, automation and transportation sectors, including the latest in mine ventilation monitoring solutions and noise reduction technology suppliers. Locally produced consumables and critical spares suppliers showing how local manufacturers can partner with local companies to solve problems and keep production plants running smoothly and efficiently. Local manufacturers delivering practical, performance-driven engineering for metallurgical applications, including slurry control dart valves, high-pressure enclosed pinch valves, dosing systems, distribution boxes and process samplers tailored to metallurgical applications. Together with local water storage solutions suppliers for mining applications that boost productivity and ensure a steady water supply.

Exhibitors will be showcasing all the latest innovations, advances in technology and breakthrough solutions, including the latest local solutions for retrofitting Tier 2 and 3 engines with Diesel Particulate Filter systems which can enable mines to comply with new mine health and safety regulations relating to diesel particulate matter. The locally developed solution helps to improve air quality in worker health, without requiring mines to replace their entire fleet of old engines.

Many South African manufacturers have been able to overcome growth constraints by growing their businesses beyond the country's borders. While the local demand for manufactured goods has been stunted, demand in the rest of Africa for locally manufactured goods has been growing, which is one way that local manufacturers are able to grow their operations. Visitors to Electra Mining Africa 2026 will be able to see many of these locally produced components that are exported all over Africa and the world, including industrial agitator sand gearboxes built for the harsh operating conditions of the local mining industry which are now exported to the UK, Malaysia, Australia, New Zealand, the US and Chile.

Visitors will also be able to see innovative pumps specifically designed for the agricultural and construction sectors to provide solutions that don't rely on electricity, while reducing cost of ownership to the client.

The exhibition is an opportunity to showcase the excellence and innovation of locally designed and manufactured parts and components for the local and international market. Locally designed and manufactured Neutral Earthing Compensator Resister Transformers (NECRTs) that provide reliable earthfault management for transformers will be on show. These and other locally made components strengthen South African manufacturing capability and ensure critical protection equipment is produced, supported and maintained locally. Also on show will be locally assembled new industrial gear units designed to improve availability, reduce lead times and support high-torque applications in Africa. The new design will improve serviceability and reduce downtime, expanding the options available to engineers and plant operators seeking robust solutions for conveyors, crushers, mixers and other heavy-duty systems.

"Beyond the exhibition floor, as part of its commitment to delivering high-value, free-to-attend content, the Southern African Institute of Mining and Metallurgy (SAIMM) will host the Seminar Theatre at Electra Mining Africa," says Hefer. "In addition, the Society for Automation Instrumentation Mechatronics and Computer Engineering (SAIMC) will present valuable industry workshops on the second day of the show."

Engineering the Future

The Growing Role of Women in Industrial Transformation

Traditionally, the engineering industry was defined by heavy machinery, industrial sites, and physical endurance. Today, it is being reshaped by artificial intelligence (AI), automation, advanced analytics, and digital technologies that are transforming how industries operate. This shift is opening new pathways for women to enter, grow, and lead in the profession.

According to the World Economic Forum's *Future of Jobs Report 2025*, technological advancements are expected to create 170 million jobs—equivalent to 14% of today's total employment—while transforming the skills required across existing roles. Engineering sits at the center of this change, with growing demand for professionals who can interpret data, optimize systems, and support intelligent decision-making.

As technologies evolve, the definition of engineering excellence is expanding. While technical expertise remains essential, engineers must now also communicate complex concepts clearly, collaborate across multidisciplinary teams, think strategically, and adapt to rapid technological and market shifts. Success is increasingly determined not only by technical ability, but also by aligning solutions with business goals and driving meaningful outcomes.

Modern engineers are expected to understand how electrical, mechanical, software, and data systems interact to deliver integrated solutions. Skills in AI and machine learning are becoming increasingly valuable as industries adopt predictive maintenance, optimization, and automation.

"The most profound shift is the move from 'fix-it-when-it-breaks' to 'predict-before-it-fails'," says Zanele Petane, Sales Specialist and Electrical Engineer at ABB. "Engineers are increasingly using data, digital technologies, and predictive analytics to optimize performance and prevent failures before they occur."

At the same time, increasing connectivity between operational systems is raising the importance of cybersecurity awareness. Tools such as digital twins, simulation software, PLCs, and SCADA systems are now integrated into modern engineering environments rather than treated as specialist applications.

For women, these developments present significant opportunities. Emerging fields such as automation, AI, cybersecurity, systems integration, and advanced analytics are expanding the scope of engineering careers and creating new pathways for growth.

"The engineering profession continues to present limitless opportunities for growth and development. As technology reshapes industries, women have an opportunity to build expertise in emerging fields that will define the future of engineering," says Sharon Bam, Mechanical Engineer at ABB.

Despite progress, women still represent only 16%–23% of South Africa's engineering workforce and remain underrepresented in senior leadership roles. As the sector evolves, there is a strong opportunity to strengthen the pipeline of female engineering talent and support more women into leadership positions where they can influence innovation and industrial transformation.

INDUSTRY NEWS

FUTURE MINERALS FORUM | BAKER INSTITUTE FOR PUBLIC POLICY RICE UNIVERSITY

FUTURE MINERALS FORUM AND BAKER INSTITUTE

CALL FOR A NEW ERA OF COLLABORATION IN GLOBAL MINING

New report urges governments, investors and mining companies to move from commitment to practical action in creating shared value.

LIMA, PERU | 25 JUNE 2026

The Future Minerals Forum (FMF) and Rice University's Baker Institute for Public Policy today released a new report making the case that the minerals industry must urgently move from intent to action on shared value creation.

Building Shared Value Propositions in the Minerals Industries: Getting to How, authored by **Mark Cutifani** and **Dr Michelle Michot Foss**, sets out a practical framework for aligning the interests of mining companies, host governments, investors, and communities.

The paper argues that flexibility in commercial frameworks, genuine community engagement, and stronger institutional capacity in resource-owning nations are the foundations on which durable mining investment must be built.

A PRACTICAL FRAMEWORK FOR ACTION

To get there, the authors identify concrete steps:

- Engaging mining businesses directly in donor and lender compact processes
- Building governance and project management capacity in host countries
- Creating commercial frameworks flexible enough to support investment decisions as conditions evolve

These practical building blocks are directly linked to the **Future Minerals Framework,** FMF's broader effort to translate shared principles into workable, executable commitments across the global mining community.

RISING COST PRESSURES HEIGHTEN URGENCY

The authors warn that structural cost pressures mean most mining operations require efficiency gains of 7 to 15 percent annually just to maintain margins, making the case for enabling policy environments more urgent than ever.

A PLATFORM FOR GLOBAL ACTION

Released at the World Mining Congress in Lima, the commentary reinforces FMF's position as a platform for action-oriented dialogue across the global mining community, convening governments, industry, and multilateral funders around practical solutions.

> **There is no one-size-fits-all model. But alignment of interests within enabling environments is the path to outcomes that work for everyone.**
> – THE AUTHORS

The commentary is the second in a series developed through the FMF-Baker Institute knowledge partnership.

KEY HIGHLIGHTS

7–15%
Annual efficiency improvements required for many mining operations to maintain profit margins.

165 COUNTRIES
Represented at the Future Minerals Forum.

18,000+ PARTICIPANTS
From around the world.

89 GOVERNMENT DELEGATIONS
Joined the global dialogue.

2022 ESTABLISHED
Future Minerals Forum launched in 2022.

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ABOUT FUTURE MINERALS FORUM

The Future Minerals Forum (FMF), launched in 2022, is the world's premier platform for collaboration across the minerals industry. FMF stands at the forefront of global industry connections, bringing together governments, international organizations, and stakeholders to collectively shape the future of the minerals industry. With 18,000 participants from 165 countries, including 89 government representatives, FMF is a catalyst for global collaboration.

The Forum is renowned for its unique approach, confronting industry challenges head-on through dialogue to promote a responsible and resilient mineral supply chain, enable development, advance global electrification goals, enhance global security, and accelerate the digital revolution.

www.futuremineralsforum.com | @FutureMinerals

THE STRAIT THAT SHOOK THE WORLD

HOW THE 2026 IRAN CONFLICT TRIGGERED THE BIGGEST ENERGY SHOCK IN MODERN HISTORY

For decades, the global economy operated on the assumption that oil would always flow and the arteries of international trade would continue to support the functioning of the world. The 2026 conflict in Iran has fundamentally challenged that assumption.

At the center of this storm is the Strait of Hormuz—just 39 km wide at its narrowest point—yet the conduit for around 20 million barrels of oil and liquefied natural gas every day, nearly a quarter of all global energy trade.

This crisis is more than geopolitical. It carries profound economic consequences that extend across the entire world.

A STRATEGIC CHOKEPOINT

The Strait of Hormuz is the world's most vital energy artery. Its geography is the first point of vulnerability.

39 KM
AT ITS NARROWEST POINT

20 MILLION
BARRELS OF OIL & LNG PASS THROUGH EVERY DAY

20–25%
OF GLOBAL ENERGY TRADE

WHY IT IS SO VULNERABLE

Iran does not need to match the US in conventional military power to pose a serious threat. It relies on asymmetric tactics such as sea mines, fast-attack boats, and drones that narrow shipping lanes—strategies designed to block or slow access and make passage dangerous and costly.

Large commercial tankers, slow and difficult to defend, exploit this gap, in this conflict, control over the strait is the most effective instrument of influence.

ONCE THE STRAIT CLOSED, MARKETS PANICKED

Brent crude surged past $120 a barrel within weeks—levels not seen since Russia's invasion of Ukraine in 2022.

Unique previous disruptions caused by a supplier exiting the market, the 2006 crisis involves a strategic chokepoint going dark. This is saructurally different—and far harder to replace.

> “When a chokepoint closes, it's not just volumes that disappear—it's confidence, planning, and stability that go with it.
> — Energy Market Analyst

THE SUPPLY SHOCK

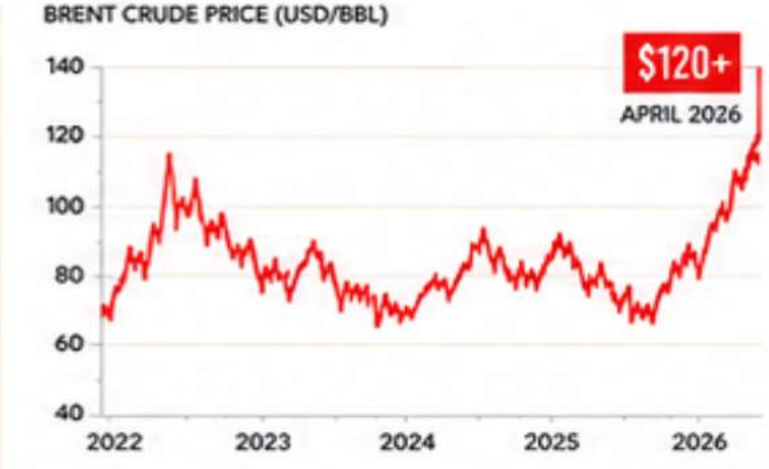
The sudden closure of the Strait of Hormuz created a supply shock of a magnitude the world has never experienced.

OPEC'S SUDDEN REVERSAL

Only months earlier, OPEC had been managing a surplus and cutting output to prevent a price collapse. Overnight, it faced a shortfall it cannot fully fill.

- Alternative pipelines—such as Saudi Arabia's East-West Pipeline and the Abu Dhabi Crude Oil Pipeline—have absorbed what they can.
- Production increases from major non-Gulf producers have begun.
- Still, these measures offset only about half of the lost supply.
- Nearly 130 million barrels of crude are now stuck in floating storage in the Gulf, loaded onto tankers that cannot deliver.

The world is facing a supply gap that cannot be closed quickly.



THE NUMBERS BEHIND THE CRISIS

~130 MILLION BARRELS of crude stuck in floating storage in the Gulf	**~50%** of lost supply can be offset by alternative routes and new output	**20 MILLION BARRELS** of oil & LNG normally flow through the Strait of Hormuz every day	**20–25%** of all global energy trade at risk

BEYOND OIL: THE RIPPLE EFFECT

Energy shocks of this magnitude never stay in oil markets. They spread through every vital chain of the global economy.

FERTILIZER
About one-third of global fertilizer trade passes through the Strait. Disruptions are pushing agricultural input costs sharply higher.

FREIGHT
Longer routes and higher insurance costs are pushing up shipping rates and delaying deliveries worldwide.

FOOD SECURITY
Higher fertilizer and fuel costs threaten future crop yields and push food prices higher.

COMMODITIES
Analysts project a 16% rise in global commodity prices as the shock spreads.

A GLOBAL PRICE PRESSURE

For economies with deep fiscal buffers and diverse import sources, this may be manageable. For those without such advantages, the consequences are devastating.

+16% Projected rise in global commodity prices in 2026

ASIA BEARS THE BRUNT

Asia receives around 85% of all crude shipments from the Gulf. The impact has been immediate and severe.

JAPAN
Relies on the Middle East for 95% of its oil. Turning to US crude at inflated spot prices + paying double shipping costs for a journey twice as long.

INDONESIA
Seeking alternative suppliers in Africa and Latin America and has committed to purchasing 150 million barrels from Russia by the end of the year.

VIETNAM
Depends on the Middle East for at least 85% of its crude imports. Its export-oriented manufacturing sector relies on affordable energy to remain competitive.

THAILAND
Usually imports up to 70% of its crude from the Middle East. Has introduced government-mandated energy-saving measures, including encouraging remote work.

OIL IMPORTS IN YEAR-ON-YEAR

30% IN APRIL 2026 the lowest level since Oct 2015

These responses are real indications of a structural realignment in global energy flows.

THE GLOBAL SOUTH UNDER PRESSURE

In South Asia and East Africa, higher import costs and currency depreciation are creating serious fiscal stress.

- Governments are spending billions on duty waivers and fuel subsidies to shield households from the full impact of the crisis—relief that adds to long-term debt.
- In economies where most household income is spent on food, the link between energy prices and food security is immediate. Fertilizer costs rise, food prices follow, and purchasing power falls, leaving little margin for error.

In 2026, the dilemma between food and fuel is being imposed on governments that neither caused the conflict nor have any ability to resolve it.

A DEFINING MOMENT FOR THE MIDDLE EAST

Gulf states are the world's leading energy exporters, yet they are also directly exposed to the ripple effects of this crisis.

- The UAE alone accounts for 18% of vessel traffic through the strait.
- Buyers are diversifying because the route to market has become uncertain.
- Countries like Türkiye could emerge as hubs for international trade as new routes and partners gain importance.

THE WORLD HAS BEEN REMINDED

The Strait of Hormuz crisis has reminded the world, and the region itself, that geography may not dictate destiny—but in moments like this, it comes perilously close.