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We live in a world of transitions. One of the most significant is energy and feedstock, as we try to diversify from the prevailing "dirty" petroleum to substances that are just as efficient, but cleaner, or so we think.

Ever dream of an inexhaustible source of cheap and absolutely clean energy? One that could use existing technology for conversion into electricity or transport? And one that might even exist in Myanmar? Let me introduce you to "white hydrogen", sourced from rocks underground, the hidden domain of planet Earth, probed by geologists.

But first, what is hydrogen?

Let's Meet Hydrogen

What is it? Hydrogen is the smallest and lightest atom in the universe. It is made of one single proton around which a single electron revolves. Hydrogen is the most abundant element, making up 75 percent of matter by weight (such as in the Sun) and more than 90 percent of all atoms.

Hydrogen is also most volatile, in other words, it is difficult to keep in a container, no matter how tight.

How safe and clean is it? Hydrogen is highly flammable, forming explosive mixtures with air between 4 percent and 75 percent. It burns with an almost invisible flame, yet very hot at more than 2,100°C, a distinct hazard. The burning residue is simply water, making hydrogen an ideally "green" source of energy.

What is hydrogen used for in the industry? Slightly less than half is used in petroleum refineries to make lighter oils and remove contaminants of petroleum such as sulphur. Most of the rest goes into producing ammonia for fertilizer and methanol for plastics. A marginal proportion is used for other purposes, for instance, for mixing in edible oils to make margarine, as a coolant in power stations, as fuel for engines of some heavy-duty trucks, in steelmaking, and in the semiconductor industry.

Hydrogen is not yet a common source of energy, mainly because about three and a half times more hydrogen than methane is needed to provide the same power.

Hydrogen is hardly ever used anymore to inflate airships. The tiniest spark can catastrophically ignite the blimp, as seen in the Hindenburg disaster

What Is White Hydrogen?

Old Geo-Geezer (OGG)

in the United States on 06 May 1937, which killed 35 of 97 passengers and one ground crew member.

How much hydrogen is used worldwide? In 2023, global hydrogen production reached 41 million of million cubic feet (a volume that we shorten into a unit dubbed "Tcf" or 41 trillion cubic feet). That's enough water volume to cover all of Myanmar under six feet. By comparison, natural gas consumption the

same year was 142 Tcf, about 3.5 times as much.

Where is hydrogen found and produced? Hydrogen is very rare in Earth's atmosphere, (about one in two million atoms). It is mostly produced from petroleum or water, and usually close to its markets. China, North America and Europe account for slightly more than half of the world's production and use.

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From the Desk of the Editor

Dear Readers,

This September, I, on behalf of the Insight! Newsletter Team, am truly delighted to celebrate the birthdays of our senior leadership. To our CEO, U Moe Myint, I send my warmest wishes for continued health, happiness, and wisdom. His vision and leadership have guided MPRL E&P through challenges and opportunities, inspiring resilience, innovation, and integrity at every step. I also wish the happiest of birthdays to U Myo Tin (DCE), U Sithu Moe Myint (COO), and U Phone Kyaw Moe Myint (DXM). Your dedication, guidance, and forward-looking spirit continue to shape our collective success.

As we step into the latter half of 2025, global oil markets remain uncertain, influenced by shifting supply, stockpiling, and geopolitical dynamics. In Asia, ongoing tensions in the Middle East still carry risks, but stronger capacity and stockpiles have helped soften the impacts. For Myanmar, energy security is not just a global challenge but a domestic one as well.

Looking toward 2026, I see opportunities ahead: smarter use of AI and technology to create more seamless workflows and efficiency, building more educational partnerships to heighten and foster employee skillsets, and new collaborations with regional partners that will help position Myanmar as a reliable energy provider.

Preparedness has always been one of our greatest strengths. Our teams are refining strategies, strengthening organizational structures, and reinforcing our assets and project blocks to ensure they remain resilient for the future and ready for whatever may come. With decades of experience in exploration and development, we continue to earn trust as both a partner and an industry leader, and I am confident we will continue to do so for many years to come.

I am proud to see our HR Department offering cross-departmental learning opportunities that allow employees to share knowledge and build confidence, helping every

staff member grow into a well-rounded professional. Alongside these efforts, we have also hosted internship programs for students from various local universities, giving them valuable opportunities to gain hands-on experience and exposure to real-life industry scenarios, as highlighted on page 8. All of these workshops, training sessions, and educational initiatives reflect our ongoing commitment to learning and innovation—and I must say, momentum never stops at MPRL E&P.

In this issue, I was particularly intrigued by the article on White Hydrogen, a naturally occurring resource found in underground reservoirs—not produced by humans through electrolysis or fossil-fuel reforming, but formed through geochemical processes. What makes it fascinating is the possibility that, if reservoirs can be located and extracted economically, white hydrogen could provide a low-carbon energy source without the high energy costs of manufacturing hydrogen.

Of course, many questions remain: where to find it, how pure it will be, and how common economically viable deposits might be. As always, exploring such topics in earth science and geoscience is both enlightening and rewarding, and expanding our knowledge in these areas is always worth it. I hope you enjoy exploring it on the cover page.

As I wrap up this note, I want to leave you with a sense of hope. Even in uncertain times, I believe in our resilience, our expertise, and the partnerships we are building. Together, we will continue moving forward, committed to innovation, sustainability, and our role in shaping Myanmar's energy future. ■

Until our next issue, cheers!

Hnin Wynt Zaw

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Events

MPRL E&P GoC Staff Families Donate Rice and Cooking Oil to Mon Myat Sate Htar Aging Home



Your Opinion: What Does “Sustainable Development” Mean to Me in My Day-to-Day Work?

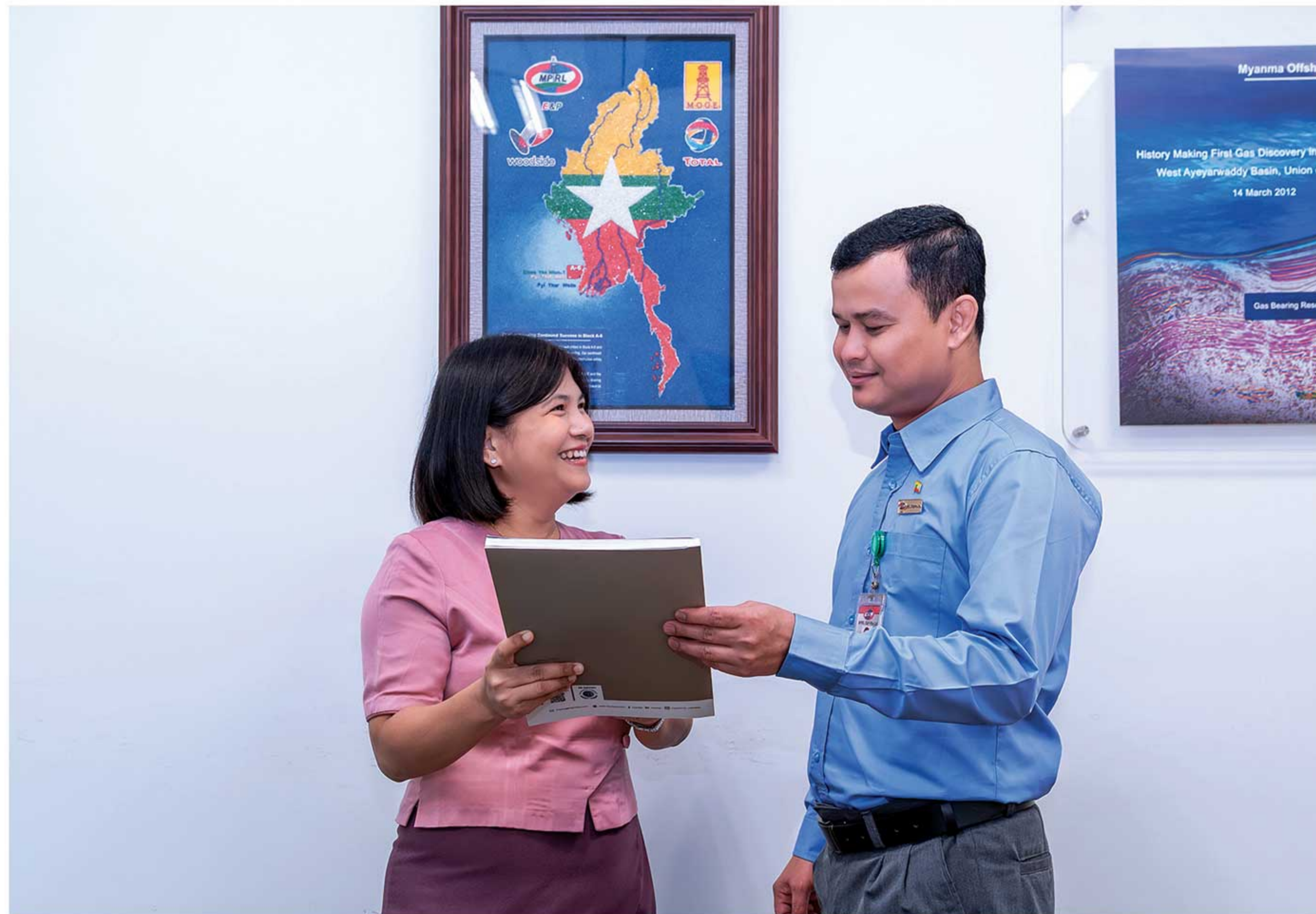
Daw Kyi Kyi Wai
Senior Auditor
Internal Audit Department

In my current role, I am responsible not only for Internal Audit but also for working across the MPRL E&P Group of Companies. This exposure allows me to learn from different industries and apply valuable insights to strengthen our organization. By using this knowledge, I help build a solid foundation that supports effectiveness and long-term success. I approach my work with the future in mind, ensuring that today's actions contribute to sustainable growth. Through my daily responsibilities, I aim to create positive, lasting impacts that align with the principles of sustainable development.

My daily work focuses on reviewing processes to ensure compliance with laws, regulations, and internal policies. This helps safeguard the company's reputation while reducing risks that could negatively affect people, the environment, or long-term business growth. Internal Audit plays a vital role in creating a strong control environment that allows the business to grow without compromising ethics, transparency, or social responsibility. Through my recommendations, I help improve efficiency, reduce risks, and strengthen the company's reputation. In doing so, I support maintaining trust with regulators, employees, and other stakeholders while contributing to the company's long-term vision.

The work I do today is focused on creating long-term value without harming the environment or future generations. For example, we maintain audit checklists and procedures to prevent recurring issues, helping other departments operate more effectively in the future. I also minimize paper usage by reviewing files digitally through systems such as Workflow Management System—small changes that create lasting positive impacts. By sharing audit findings clearly each week, I enable departments to solve problems faster and avoid repeat issues. Each audit becomes an opportunity to strengthen controls, reduce waste, and ensure the organization operates responsibly.

I am proud that my work not only supports immediate business success but also contributes to the company's sustainable growth—helping to protect people, resources, and the environment for future generations. ■



U Kyaw Thu
Senior Administrative Assistant
Administration & Contracts Department

When I think about the future, I focus on growth and sustainability for our organization. As a Senior Administrative Assistant at MPRL E&P, my responsibility is not only to meet today's needs but also to ensure that our organization can thrive in the long term. For me, this means making the right decisions in the daily management of office fleet, transportation, facilities, and resources.

In my role, I see how everyday actions can protect people, the environment,

and resources while also contributing to the company's growth. Coordinating vehicle use efficiently helps unnecessary trips, which lowers fuel consumption and minimizes emissions. Regular maintenance keeps our office vehicles safe for drivers and staff while also extending their lifespan. This not only reduces waste and repair costs but also ensures that company resources are used responsibly.

Sustainability also extends to the office environment. By ensuring that facilities are well-maintained, from air-conditioning systems to lighting, we support energy efficiency and reduce unnecessary consumption. Efficient management of office facilities and resources helps minimize waste, lower costs, and create benefits for both people and the environment, while also supporting the company's long-term growth.

I believe that sustainability and success go hand in hand. By managing resources wisely, we help the company control costs, improve safety, and reduce unnecessary waste. Scheduling drivers effectively, maintaining office facilities, monitoring vehicle repairs, and managing expenses are all opportunities to respect the environment while supporting MPRL E&P's long-term objectives.

To me, sustainable development is not only about big ideas or initiatives—it is about making the right choices every day. When each of us takes ownership of our responsibilities, we contribute to creating a future that is safe, efficient, and sustainable. ■

“Sustainable development is not only about big ideas or initiatives—it is about making the right choices every day.”

MPRL E&P Extends CSR Support for MOGE Employees in FY 2025–2026

Moe Thu Zar Soe

MPRL E&P has continued to extend dedicated support to employees of the Myanmar Oil & Gas Enterprise (MOGE) in Mann Field through its MOGE Employee-Centered CSR Program.

Beginning in Fiscal Year 2024–2025, the company established a dedicated CSR budget for employee-centered initiatives, with contributions sustained into Fiscal Year 2025–2026 starting in April 2025.

During the second quarter of Fiscal Year 2025–2026, MPRL E&P made financial contributions to support traditional and religious activities in Mann Field Communities.

This included a donation of MMK 200,000 towards the Waso Robe Offering Ceremony organized by the Minbu District General Administration Department, and MMK 1,900,000 to support the Sabbath day meal donation program during Buddhist Lent at the Mann Field Dhammayon.

Further strengthening its commitment to employee welfare, MPRL E&P has also provided educational support. Since May 2025, the company has been granting a scholarship to one student admitted to the one-year Industrial Skills Training Program at No. (5) Industrial Training Center (Magway), who is

also a family member of a MOGE employee. A total of MMK 896,000 was provided to cover the student's expenses from May to September 2025.

Through its MOGE Employee-Centered CSR Program, MPRL E&P reaffirms its commitment to supporting MOGE employees and their families, promoting community well-being and long-term capacity development. ■

Building a Safety-First Culture: Firefighting Training at MPRL E&P

Sithu Zeya

Fire safety awareness is a vital part of building a strong safety-first culture within any organization. It ensures employees are prepared to prevent and respond effectively to fire emergencies, safeguarding lives, property, and operations.

As part of MPRL E&P Group of Companies' ongoing safety and preparedness initiatives, a basic firefighting training session was conducted on 29 July 2025 for employees. The training was held at two locations: the Motor Transport Office and the Gallery Ohnmar compound.

The session was facilitated by officials from the Hlaing Township Fire Brigade, led by U Thet Aung Phyoe, Deputy Staff Officer, along with his team. The program was designed to equip employees with the knowledge and practical skills required to confidently respond to incipient-stage fires, particularly through the correct use of portable fire extinguishers.



HSE Manager U Nay Myo Aung highlighted the importance of continuous training, stating:

“Through regular training, drills, and safe practices, employees share the responsibility of maintaining a safe workplace. This approach not only ensures legal compliance but also fosters stronger teamwork and builds a more resilient, safety-conscious culture.”

The training combined both theoretical and practical components. Participants attended a presentation on the fundamentals of firefighting, followed by hands-on demonstrations and practice exercises. A total of 48 personnel took part in the session: 34 security staff, 12 drivers from Myint & Associates,

and 2 staff members from Gallery Ohnmar.

In addition to technical instruction, U Thet Aung Phyoe shared valuable insights from his extensive field experience, offering participants a deeper understanding of real-life fire safety practices.

At MPRL E&P Group of Companies, we remain committed to maintaining the highest standards in safety and emergency preparedness. By continuously building the capacity of our workforce—particularly in prevention and protection—we ensure our teams are well-equipped to safeguard lives and assets across all operations. ■

MPRL E&P Strengthens Workforce Knowledge through Monthly Training Sessions

Moe Thu Zar Soe

At MPRL E&P, the HR Team continues to facilitate cross-departmental learning opportunities through its monthly knowledge-sharing initiative, guided by Training Needs Survey results. Since April 2025, sessions have covered diverse topics including “Raw Water Treatment for Waterflooding Project” by the Planning and Production Engineering Department, “Myanmar Union Taxation” by the Internal Audit Department, “Mann Field Operations” by the Planning and Production Engineering Department, “Minimum Criteria and Information for a Valid Contract” by the Compliance Department, and “Introduction to Petroleum Geology” by the Geoscience Department.

One of the most recent sessions on contracts was particularly well received. HR Officer Daw Ei Ei Htun explained that many employees have limited understanding of contracts and often find the process of managing them intimidating.

The session was therefore designed to build both foundational knowledge and confidence. To ensure accessibility, it was conducted in dual formats, in-person and online via Microsoft Teams, on 25 July 2025, with 164 employees participating.

Engagement levels were high, with participants actively asking questions and contributing to discussions.

The session was facilitated by Daw Moe Ma Ma Myo, Legal & Compliance Officer, who guided employees through the essentials of legally sound agreements. She emphasized that the training aimed to provide a practical understanding of contractual requirements, reduce risks, strengthen compliance, and build confidence in handling contracts across functions. In this session, key topics included the elements required for a valid and enforceable contract, along with important terms, conditions, and legal considerations. Feedback from participants indicated that the session was not only valuable for work-related responsibilities but also applicable to personal situations. Suggestions for improvement included dedicating more time to industry-specific contract templates and offering follow-up workshops to reinforce learning.

On 27 August, Geoscience Manager U Kyaw Soe Win conducted a knowledge-sharing session on Introduction to Petroleum Geology for 122 participants from the Yangon Head Office and Mann Field.

The session focused on the fundamentals of geology, the formation of oil and gas, and the practical applications of geology in the oil and gas industry. Many participants demonstrated strong enthusiasm to learn the basics of Petroleum Geology, as reflected in the surge of questions raised after the training sessions. The Geoscience Manager addressed the inquiries with detailed explanations and clarifications.

From an HR perspective, this initiative highlights how targeted knowledge-sharing supports both individual development and organizational growth. By integrating legal compliance, and technical expertise into the company's learning strategy, employees are better equipped to bridge knowledge gaps that could otherwise impact operational effectiveness.

Moving forward, HR plans to organize additional training sessions on industry-related knowledge, enabling employees from diverse functions to gain deeper insights into both technical and business support areas relevant to their roles. ■

Leading the Way in Responsible Production and Environmental Stewardship at Mann Field

Soe Than Naing

For over two decades, MPRL E&P has led production enhancement operations in Mann Field, one of Myanmar's key onshore oil and gas developments. The company has consistently operated responsibly, advancing ethical environmental management through the effective implementation of its Environmental Management Plan (EMP) and Environmental Monitoring Programs.

In alignment with national regulatory requirements, MPRL E&P conducted a comprehensive Environmental Impact Assessment (EIA), which led to the award of the Environmental Compliance Certificate (ECC) by the Environmental Conservation Department (ECD) under the Ministry of Natural Resources and Environmental Conservation (MONREC) in April 2019. This milestone marked the first ECC ever issued in Myanmar for an operating onshore oil and gas block. Continuing its commitment to compliance and sustainability, the company secured the first ECC extension in April 2024, reinforcing its dedication to environmental protection and operational transparency.

Sustaining Zero Discharge and Strengthening Environmental Compliance

Since achieving zero discharge of produced water across the entire Mann Field on 24 August 2017, MPRL E&P has consistently reinjected 100% of produced water into designated shut-in wells through a dedicated injection system. This initiative demonstrates the company's unwavering commitment to environmental stewardship and sustainable resource management. The practice not only ensures compliance with the National Environmental Quality (Emission) Guidelines (NEQEG) and the International Finance Corporation (IFC) Waste Management Guidelines, but also plays a critical role in maintaining reservoir pressure and preventing ground subsidence from long-term hydrocarbon extraction.

High-Standard Results from Environmental Oversight

The Regional Environmental Conservation Department (ECD) has conducted site inspections and field visits to assess the implementation of environmental monitoring programs. Evaluations covered key parameters including air quality, noise levels, groundwater and surface water quality, soil



and sludge conditions, hydro-test wastewater, and emissions monitoring.

Significantly, all indicators were within the acceptable limits defined by the NEQEG, and no harmful or toxic gases were detected. These results reflect MPRL E&P's strong commitment to effective and efficient environmental management.



Sustainable Waste Management Practices in Field Operations

MPRL E&P has implemented a robust waste management framework aligned with ISO 14001 standards to minimize environmental impact. During ECD site inspections, it was confirmed that all solid and hazardous wastes are properly segregated at the source, tracked, stored, and disposed of through licensed waste handlers in full compliance with the EIA commitments.

Recyclable and reusable materials are transferred to authorized third-party vendors and the Waste-to-Energy Plant. Operational areas are equipped with color-coded bins and clear signage to reinforce proper segregation and disposal practices. Designated waste storage zones are regularly inspected to prevent cross-contamination and ensure protection of the environment.

These practices demonstrate the company's ownership, accountability, and commitment to continuous improvement in environmental performance.

Emergency Response and Spill Control Preparedness

The company upholds stringent emergency preparedness standards through a comprehensive Emergency Response Plan (ERP). Regular drills simulate fire outbreaks, chemical spills, and worker injury scenarios, strengthening on-site readiness and rapid response capabilities. In addition, spill prevention and containment systems are in place at high-risk locations, supporting the company's zero-discharge strategy.

Biodiversity Conservation and Environmental Awareness

Environmental preservation is deeply embedded in MPRL E&P's culture. The company actively promotes biodiversity awareness by:

- Conducting staff training sessions on conservation.
- Avoiding ecologically sensitive areas.
- Applying the mitigation hierarchy principle (avoid, minimize, manage, offset).
- Integrating biodiversity considerations into planning, design, operations, and decommissioning.

Annual tree-planting campaigns to celebrate World Environment Day further support carbon sequestration, ecological restoration, and community-based environmental initiatives.

Through steadfast adherence to international best practices, MPRL E&P continues to demonstrate leadership as a forward-thinking and responsible energy operator. The company's unwavering commitment to environmental stewardship, operational safety, and proactive community engagement not only ensures regulatory compliance but also sets a benchmark for sustainable onshore oil and gas operations in Myanmar—preserving ecosystems for future generations. ■

Plantation Campaign in Mann Field

Nay Myo Aung



MPRL E&P recognizes the importance of environmental responsibility, particularly in Mann Field, where oil and gas activities have taken place for several decades. As part of its long-term sustainability strategy, the company has taken proactive steps to restore the natural environment through plantation programs carried out in collaboration with the local community.

These plantation efforts form a significant part of biodiversity conservation. By prioritizing native and ecologically compatible species, the initiative contributes to habitat restoration, species diversification, and the delivery of vital ecosystem services such as soil stabilization, carbon sequestration, and microclimate regulation.

Biodiversity encompasses the variety of life within an ecosystem, including species diversity, genetic diversity, and ecosystem diversity. In degraded or industrially impacted areas like Mann Field—where deforestation, habitat fragmentation, and soil degradation are common—plantation initiatives act as a restorative mechanism that directly supports biodiversity goals.

How Plantation Supports Biodiversity in Mann Field

- Habitat Restoration:** Reintroducing vegetation helps re-establish habitats for flora and fauna, including species under threat due to environmental disturbance.
- Species Diversification:** Plantations that integrate native trees, shrubs, and understory plants enhance species richness and strengthen ecological networks such as pollinators, decomposers, and seed dispersers.
- Ecosystem Services:** Plantations improve soil stability, regulate water cycles, sequester carbon, and moderate local microclimates—all critical functions for sustaining biodiversity.
- Buffer Zones and Corridors:** Strategically planted areas create ecological corridors that connect fragmented habitats, supporting wildlife movement and genetic exchange.

The ecological value of a plantation, however, depends largely on design and execution. While monoculture or non-native plantations offer limited benefits and may even threaten biodiversity, initiatives rooted in ecological restoration with native species provide long-term resilience and environmental balance.

Plantation Efforts in Mann Field

Years of industrial activity have led to environmental degradation in Mann Field, posing challenges to the region’s biodiversity. Recognizing this urgency, MPRL E&P has committed to restoring ecosystem health through responsible land-use practices, particularly community-based plantations.

Since 2017, the company has commemorated World Environment Day with annual tree-planting campaigns, resulting in the planting of 2,876 mango trees across approximately 9 acres. The selection of Sein Ta Lone mango trees reflects not only their adaptability to local conditions but also their ecological and socio-economic benefits. These include high survival rates, low maintenance requirements, strong community acceptance, and alignment with MOGE’s environmental preferences.

Planting mango trees, especially the Sein Ta Lone variety, delivers multiple benefits:



Tree Plantation Campaign in Mann Field (2017–2025)

Date	Location (s)	Kinds of Plants	Total Planted	Remarks
20-July-2017	GOCS-3 Compound	Sein Ta Lone Mango	65	Grafted
03-June-2019	GOCS-3 Compound, schools, surrounding communities	Sein Ta Lone Mango	150	Grafted
05-June-2022	GOCS-2, GOCS-1, Waste Management Compound, Down Hole, Mechanical Workshops	Mango, Tamarind, Neem, etc.	300	250 Mango 50 others
26-June-2023	MOGE Guest House Campus	Sein Ta Lone Mango	30	Grafted
20-June-2023	BNU Workshop, MOGE (Mann Field)	Sein Ta Lone Mango	105	Grafted
21-June-2023	Multiple villages (Mann Kyo, Kywe Cha, Chin Taung, Mei Bayt Kone, etc.)	Sein Ta Lone Mango	1,602	Seed grown and grafted
24-July-2024	Near MOGE Guest House Area	Sein Ta Lone Mango	232	Grafted
30-June-2025	Near MOGE Guest House Area	Sein Ta Lone Mango	130	Grafted
17-July-2025	Near Base Camp	Sein Ta Lone Mango	127	Grafted
Total			2,926	



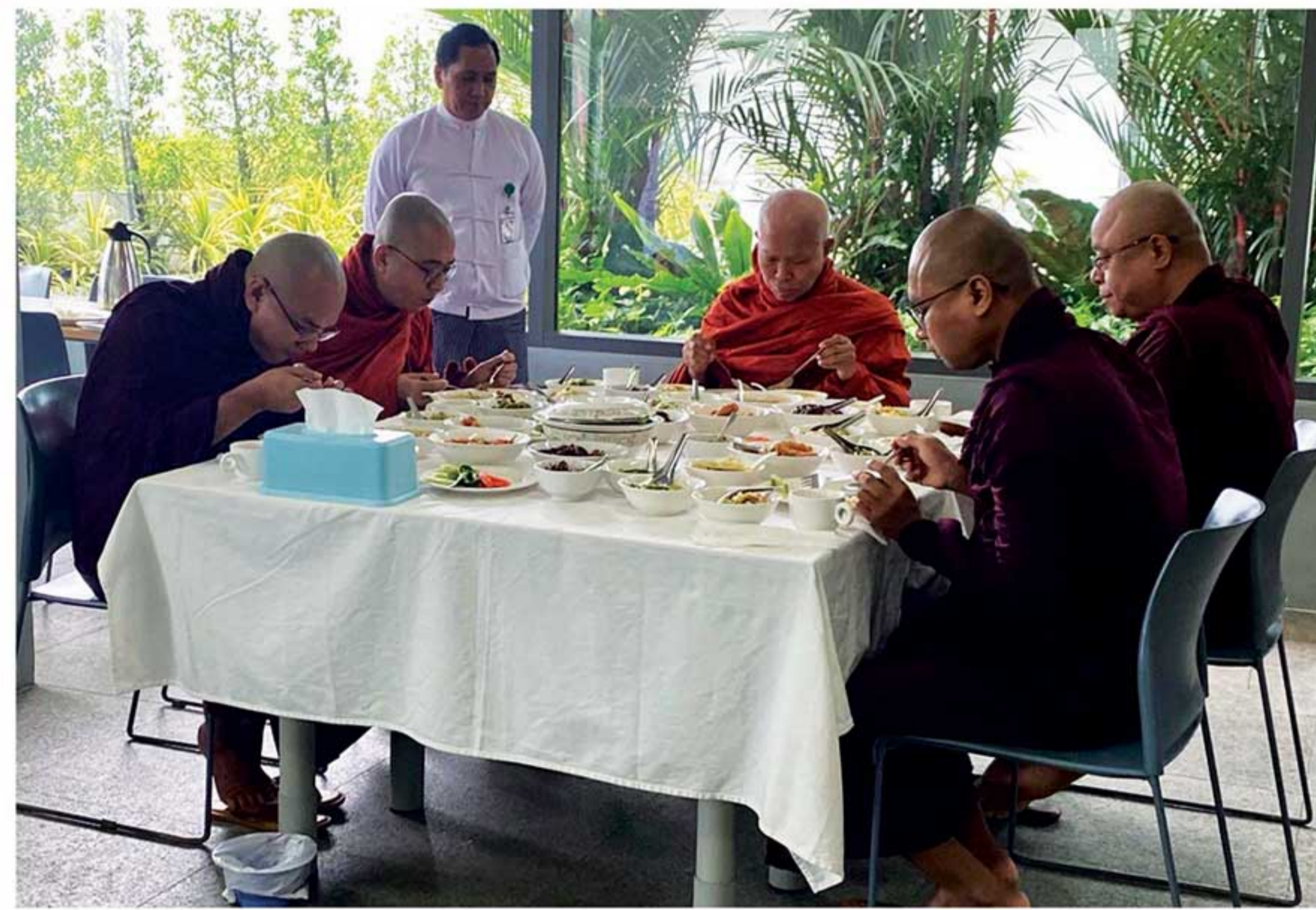
- Environmental:** improved soil stability, erosion control, carbon sequestration, natural shade, and habitats for wildlife.
- Socio-economic:** seasonal fruit production and contributions to local livelihoods.
- Sustainability:** enhanced air and soil quality, microclimate regulation, and resilience for future generations.

Community Involvement and Shared Stewardship

Community involvement remains a cornerstone of the initiative. MPRL E&P provides high-quality seedlings and technical guidance, while villagers contribute local knowledge, prepare planting sites, and nurture the young trees. This collaboration fosters community empowerment, knowledge sharing, and a sense of long-term ownership—ensuring sustainable management well beyond the planting phase.

Events

MPRL E&P Group of Companies Hosts Annual Waso Robe Offering Ceremony at Vantage Tower



From Page 06

Looking Ahead

Through these plantation initiatives, MPRL E&P demonstrates its accountability in balancing operational goals with environmental preservation. By aligning with global environmental standards and promoting inclusive community engagement, the company sets a strong example of how corporate action can support biodiversity and safeguard the well-being of future generations.

Importantly, the mango plantation initiative is not just about planting trees, but about ensuring their sustainability through regular monitoring and follow-up. By emphasizing proper care, community participation, and ongoing assessment, MPRL E&P reinforces its commitment to meaningful reforestation—where success is measured not only in numbers, but in long-term impact and shared stewardship.

Through these plantation initiatives, MPRL E&P demonstrates its commitment to balancing operational goals with environmental preservation. By involving local communities, selecting climate-resilient species, and prioritizing long-term care, the company is helping to restore ecosystems while promoting sustainable livelihoods in Mann Field. ■



Bridging Academia and Industry:

MPRL E&P's Educational Impact

Moe Thu Zar Soe

For more than a decade, MPRL E&P has played a pivotal role in strengthening the connection between academic institutions and Myanmar's energy industry. Since 2013, education has been a cornerstone of the company's social investment strategy, focusing on bridging the gap between classroom theory and real-world application.

Through internships, thesis supervision, and hands-on training at Mann Field, MPRL E&P has equipped engineering students with the knowledge, experience, and industry exposure needed to succeed professionally. The company has also contributed essential technical resources, including crude oil samples, downhole tools, and facility components—to enhance teaching environments at universities and technical institutes nationwide. Between 2013 and 2024, nearly 100 students, comprising 63 percent male and 37 percent female, from Yangon Technological University, Thanlyin Technological University, and the University of Yangon benefited from MPRL E&P's educational initiatives. This long-standing engagement demonstrates the company's commitment to building local capacity and nurturing a skilled, sustainable energy workforce for Myanmar's future.

Technical Manager U Thu Nyo emphasized this enduring commitment, stating:

"As a testament to our ongoing dedication, MPRL E&P responsibly hosted an impactful internship program from 18 December 2024 to 31 January 2025. This initiative not only provided three final-year students from Yangon Technological University with invaluable hands-on experience but also guided them in preparing their theses within the intricate realm of oil and gas operations. Complementing this, an additional nine students from Yangon University's Geology Department also participated in an internship from 02 May to 30 June 2025, gaining crucial exposure to industrial practices pertinent to petroleum geology. Building on the success and momentum of these programs, we strategically introduced a comprehensive Educational Knowledge-Sharing Program. Spanning from February to September 2025, this structured program is

designed to cover the entire academic year, targeting third- to final-year petroleum engineering students. Its primary objective is to equip aspiring professionals with practical skills and provide them with essential industry insights, bridging the gap between academia and practical application."

The program's sessions were led by 10 experts from MPRL E&P's Technical (Reservoir, Drilling and Production Engineering) and Pyithayar Integrated Project Departments, covering a wide range of topics relevant to both onshore and offshore petroleum operations. These included: Reserve Optimization for a Mature Field, Applied Reservoir Engineering, Basic Subsea System Overview, Nature of Gas Influx and Well Control Strategy, Overview of Offshore Rigs and Structures, Production Facilities in Oil Fields, Facility Processing Equipment, Careers in the Oil and Gas Industry.



"As part of this program, we delivered a session titled "Production Facilities of Onshore Oil Field" on 13 August 2025, attended by 20 third- to final-year students. The students showed great interest, asking thoughtful questions and engaging actively in discussions," said U Moe Zaw Tint, Planning and Production Engineering Manager at MPRL E&P.

To complement classroom learning with industry exposure, a collaborative educational excursion is also planned in partnership with Myanma Oil & Gas Enterprise (MOGE). Students will visit the Offshore Supply Base in Thaketa and the Gas Supply Station in Ywarma, gaining real-world insights into oil and gas infrastructure and operations.

According to the Executive Summary Report for this program, the initial sessions received enthusiastic feedback from students. Interactive features such as quizzes, open discussions, and Q&A segments encouraged participation and boosted comprehension. Post-session evaluations revealed that more than 80 percent of students answered quiz questions correctly, reflecting both a strong grasp of the material and a growing confidence in their field of study.

Daw Thin Thandar Win from the Pyithayar Integrated Project Department highlighted one important outcome: "One key insight from the sessions was the significant knowledge gap in Offshore Engineering related topics such as Basic Subsea System and Overview of Offshore Rigs and Structures. While most students were relatively well-versed in onshore operations, these topics sessions revealed that offshore systems remained unfamiliar—particularly among younger students. The possible reason could be that Basic of Offshore Engineering is only introduced in the fourth year of Bachelor's Degree Programs. Given Myanmar's promising offshore resources, it is paramount to equip young engineers with the fundamentals. Nevertheless, the enthusiasm and engaged participation of students throughout these sessions highlight the Myanmar youths' notable capacity for mastering new concepts and accelerated learning."

The program's carefully curated content, delivered by seasoned professionals, not only bridged knowledge gaps but also made complex concepts accessible and relevant. To inspire students further, top performers in quiz sessions were recognized with prizes, adding encouragement and motivation to the experience.

Through this well-rounded initiative, MPRL E&P continues to cultivate a spirit of learning and professional readiness among Myanmar's next generation of engineers. The company's sustained investment in education and capacity building reaffirms its belief that the future of the energy sector rests in the hands of well-informed, practically trained young professionals ready to lead with competence, confidence, and purpose. ■



Events

MPRL E&P Honors Employee Dedication with Service Years Awards Across the Group



Daw Hsu Yi Aung, Senior Accountant, Finance Department

Congratulations to our Outstanding Performers for the Fiscal Year 2024-2025!



U Aye Min Tun, Senior Engineer, Field Operations Department

Embracing New Challenges: An Inspiring Path into HSE

Hnin Wynt Zaw



Daw Khin Thiri Yadanar is a great example of how diverse backgrounds can bring valuable perspective to administrative roles. Her journey from language specialist to HSE Administrator shows that curiosity, adaptability, and a commitment to learning can open unexpected doors. At MPRL E&P, she continues to make a meaningful impact by helping ensure that safety and communication go hand in hand.

Can you tell us about your academic background and how it shaped your career?

I graduated from Yangon University of Foreign Languages in 2016 with a specialization in Korean, and later earned a Diploma in Business Administration. My university studies gave me strong communication skills, cultural understanding, and attention to detail, while the business diploma built my abilities in organization, planning, and management. Together, these experiences helped me succeed in both people-focused and administrative roles, and prepared me to adapt quickly when moving into new fields such as HSE.

What were your early career steps before joining the oil and gas industry?

After graduation, I started as a Korean Translator and later worked as a freelance Korean language teacher, while also teaching Burmese to foreign learners. These roles strengthened my ability to handle diverse clients, manage schedules, and communicate effectively. In 2018, I decided to make a big move and joined Myint & Associates Co., Ltd.

How did your journey begin with Myint & Associates Co., Ltd and MPRL E&P?

I joined Myint & Associates in 2018 as a Junior Receptionist, after learning about the company at a job fair. The role matched my skills in organization, communication, and office coordination, and gave me valuable exposure to different teams and corporate processes. In 2021, I transferred to MPRL E&P in the same role, where I continued to build my administrative experience before moving into the HSE Department.

This transfer was made possible because a Junior Receptionist position opened at MPRL E&P, and Senior Management gave me the opportunity to continue developing my skills in a larger corporate environment within the oil and gas industry.

What led you to move into the HSE Department?

I wanted to take on a new challenge and explore a different side of the company's operations. The HSE Department gave me the opportunity to work in a compliance and safety-focused role, where I could apply my organizational skills while also contributing to workplace safety.

In your opinion, why is HSE crucial for an oil and gas company?

HSE is essential for protecting employees, safeguarding the environment, and ensuring compliance with regulations. In the oil and gas industry, risks can be significant, and effective HSE practices not only save lives but also support operational efficiency and the company's reputation. Recognizing its importance was one of the main reasons I chose to move into this department.

Which part of your job excites you most and why?

I enjoy coordinating safety activities such as inspections and awareness programs, and seeing the positive impact they have on employees. It's rewarding to know that my work contributes to a safer and more prepared workplace.

Are there any challenges in your career? If so, how do you tackle them?

One of my main challenges has been adapting to technical terms and safety procedures without having a technical background. I've tackled this by attending HSE training sessions, including monthly interdepartmental knowledge-sharing programs, seeking guidance from experienced colleagues, and studying on my own.

Can you share a special project you have led or participated in, particularly in relation to health, safety, or employee engagement?

One of the projects I'm most proud of was organizing HSE campaigns such as "Know Your Body" (Health Campaign), flu vaccinations, and HSE awareness trainings. I was responsible for preparing materials, coordinating across departments, and ensuring everything ran smoothly. What I enjoyed most was seeing employees actively participate and give positive feedback. These initiatives not only strengthened our safety culture but also encouraged everyone to be more engaged in their own health and wellbeing.

Who is your biggest mentor and why?

My biggest mentor is my former Korean professor. She taught me the importance of discipline, continuous learning, and resilience—qualities that have helped me adapt and grow in every role I have taken on.

What three work ethics or skillsets are most important in your role and why?

In my role, the three most important skillsets are attention to detail, communication, and organizational ability. Attention to detail is critical because even small errors in documentation or reporting can affect safety compliance and company performance. Strong communication helps me share information clearly across departments—whether scheduling safety activities, preparing reports, or coordinating with external partners. Organizational ability ensures I can manage records, deadlines, and multiple tasks at once. Together, these strengths allow me to perform my administrative responsibilities effectively while supporting the overall goals of the HSE team.

What do you like to do during your free time? How do you motivate yourself to get better at your field?

In my free time, I enjoy yoga, cooking, and learning new skills. I also focus on improving my efficiency at work—whether by practicing advanced Excel functions, strengthening my presentation and language skills, learning new document management techniques, or organizing digital files more effectively. These practices help me stay motivated and continue developing in my role.

Where do you see yourself in the next five years?

In the next five years, I see myself growing into a more senior administrative role. I want to not only manage day-to-day tasks but also take ownership of larger projects, such as improving reporting systems, implementing more efficient document management, and supporting audits and compliance requirements. I also hope to mentor junior staff, sharing the importance of attention to detail and organizational skills in HSE. At the same time, I plan to expand my technical knowledge so my administrative expertise continues to directly support overall performance.

From childhood fascination to 14 years of service in Mann Field, U Myo Chit Oo's journey reflects dedication, growth, and commitment to safety.

For U Myo Chit Oo, engineering has always been more than a career—it is a lifelong passion. Growing up in Minbu Township, Magway Region, he was inspired at a young age by his father, who worked with Myanma Oil & Gas Enterprise (MOGE) in Mann Field. Frequent visits to the job site left a lasting impression on him. The sight of heavy machinery used during drilling and well servicing operations sparked his curiosity and a determination to one day work with such equipment himself. Encouraged by his family and supported by his sister, a teacher, he pursued higher education at Technological University (Magway) in 2002, graduating in 2008 with a Bachelor of Engineering in Mechanical Power.

After completing his studies, U Myo Chit Oo returned to Mann Field—the very place where his passion had begun years earlier. In 2011, he joined MPRL E&P as an Assistant Engineer, and by 2014, his commitment and technical capability earned him a promotion to Engineer. Over 14 years later, he continues to serve proudly in this role, working as part of the Production Enhancement Project Team.

His work centers on the mechanical workshop, where he and his team are responsible for both preventive maintenance and urgent repairs. Every morning begins with a toolbox talk with co-workers, followed by site visits to inspect pulling units as part of daily checkups. Other key equipment—including rolling stock, Gas & Oil Collecting Station (GOCS) formation water transfer pumps, crude oil bowser transfer pumps, Puma air compressors, and water injection pumps—is also inspected and, when necessary, repaired with precision. These inspections and repairs follow a preventive maintenance schedule to ensure machinery is kept in reliable working order. “If a machine breaks down, timely repair is essential to avoid delays. Our team makes sure every piece of equipment is in reliable working order so operations can continue without interruption,” he explained. This sense of responsibility motivates him daily, knowing that smooth operations depend on the reliability of his team’s work.

Although his university education provided him with a strong foundation, much of U Myo Chit Oo’s expertise has been developed through hands-on experience. Early in his career, he devoted himself to studying machinery manuals, researching troubleshooting methods, and learning about electrical components outside of his academic background. He credits senior colleagues for generously sharing their knowledge, which helped him refine his technical skills and build confidence in solving complex problems.

A Lifelong Passion for Engineering and Safety

Hnin Wynt Zaw

He also took advantage of professional development opportunities offered by the company. Attending the Dale Carnegie Leadership Program was a defining moment in his career growth. The training improved his communication, planning, and management skills, which he now applies in leading projects and coordinating with other teams.

In the oil and gas industry, safety and environmental responsibility are non-negotiable, and U Myo Chit Oo embodies this principle in his daily work. Every day begins with toolbox talks, safety briefings, and reviews of Job Safety Analysis (JSA) and Standard Operating Procedure (SOP). “Safety is always the first priority. No work starts without the necessary precautions in place,” he emphasized.

His team also works diligently to reduce environmental impact. Waste oil is carefully collected and stored, grease and wastewater are filtered before reuse, and oil spills are contained using dedicated kits. By following these practices, the workshop ensures that operations not only remain safe but also environmentally sustainable.



Like any engineer, U Myo Chit Oo has faced his share of challenges. One memorable experience occurred during a night shift at the M-375 well site when a rig engine suddenly failed to start. Upon inspection, he and his team discovered the starter motor had broken down. With limited time and



high pressure, they quickly replaced the part and successfully restored the engine. For him, this moment stands out as a reminder of the importance of technical knowledge, teamwork, and calm decision-making under stress.

Reflecting on his career, U Myo Chit Oo takes pride in the skills he has gained and the contributions he has made to MPRL E&P. From his early days learning from senior engineers to his more recent role as a mentor for junior staff, he sees his journey as a balance between continuous learning and giving back.

When asked what advice he would give to new employees, his message was clear: “If your passion matches the tasks, this is not only a place to learn but also a place to build a career and make a living.” He believes that with the right mindset, Mann Field is more than just a workplace—it is an environment where dedication, teamwork, and passion can create lasting opportunities.

From a young boy fascinated by machinery to a seasoned engineer contributing to one of Myanmar’s most important oil fields, U Myo Chit Oo’s story is one of passion, perseverance, and purpose. His journey demonstrates how early inspiration, combined with hard work and continuous learning, can evolve into a meaningful career. Just as importantly, it highlights the vital role of safety, teamwork, and environmental responsibility in ensuring not only successful operations but also a sustainable future for the communities around Mann Field. ■

“Safety is always the first priority. No work starts without the necessary precautions in place. If your passion matches the tasks, this is not only a place to learn but also a place to build a career and make a living.”

From Page 10

If there is something you want to change about yourself, what would it be?

I would like to become more confident in decision-making and taking initiative. At times, I spend too much time double-checking myself before moving forward. Building stronger confidence would help me take on greater responsibilities more effectively. On a personal level, I also want to improve my work-life balance. I often focus heavily

on work and don’t give enough time to personal development or relaxation. Balancing both would make me more productive at work while maintaining a healthier lifestyle.

What advice would you give someone considering a move into HSE from a non-technical background?

Be open to learning every day. Ask questions, take

training seriously, and recognize the value of soft skills like communication, organization, and problem-solving. Combined with a willingness to learn the technical side, these strengths can make you a valuable member of any HSE Team. ■



Celebrating the Birthdays of our CEO and COO



Birthday Donations in Honor of CEO U Moe Myint



In celebration of CEO U Moe Myint's birthday, staff members of MPRL E&P Group of Companies organized charitable donations on 10 and 11 September 2025. Essential provisions such as rice, cooking oil and groceries were donated to Tikkha Rama Nunnery Education Center, See-Zar-Yeik (Twilight Villa) Association for the Care of Aged and Ailing Persons, San Mya Thidar Nunnery Education Center, Pyuntaza Nunnery Education Center, Mitta Parahita Villa in Mayanchaung, Hlegu, and Karuna Children's Home (Christian orphanage).



In addition, cash contributions were made to the Jivatana Sangha Hospital medicine fund, and lunch was served to 600 hospital attendants at Yangon General Hospital. ■



Happy Birthday, DCE!

Your steadfast leadership, dedication, and guidance have been invaluable in steering our company toward growth and resilience. We sincerely thank you for your continuous support, advice and encouragement, which motivate us to perform at our best and work together toward our shared goals.

May this year bless you with good health, happiness, and continued wisdom in your leadership journey.



Happy Birthday, COO!

Here is our warmest birthday wishes to our Chief Operating Officer! Your innovative vision, dedication and forward-looking leadership inspire us to embrace change and strive for excellence in everything we do. We thank you for motivating us with your energy, creativity, and guidance, which continue to drive our company toward new opportunities and success.

May this birthday bring you joy, good health, and renewed inspiration as you lead us into the future.



Happy Birthday, DXM!

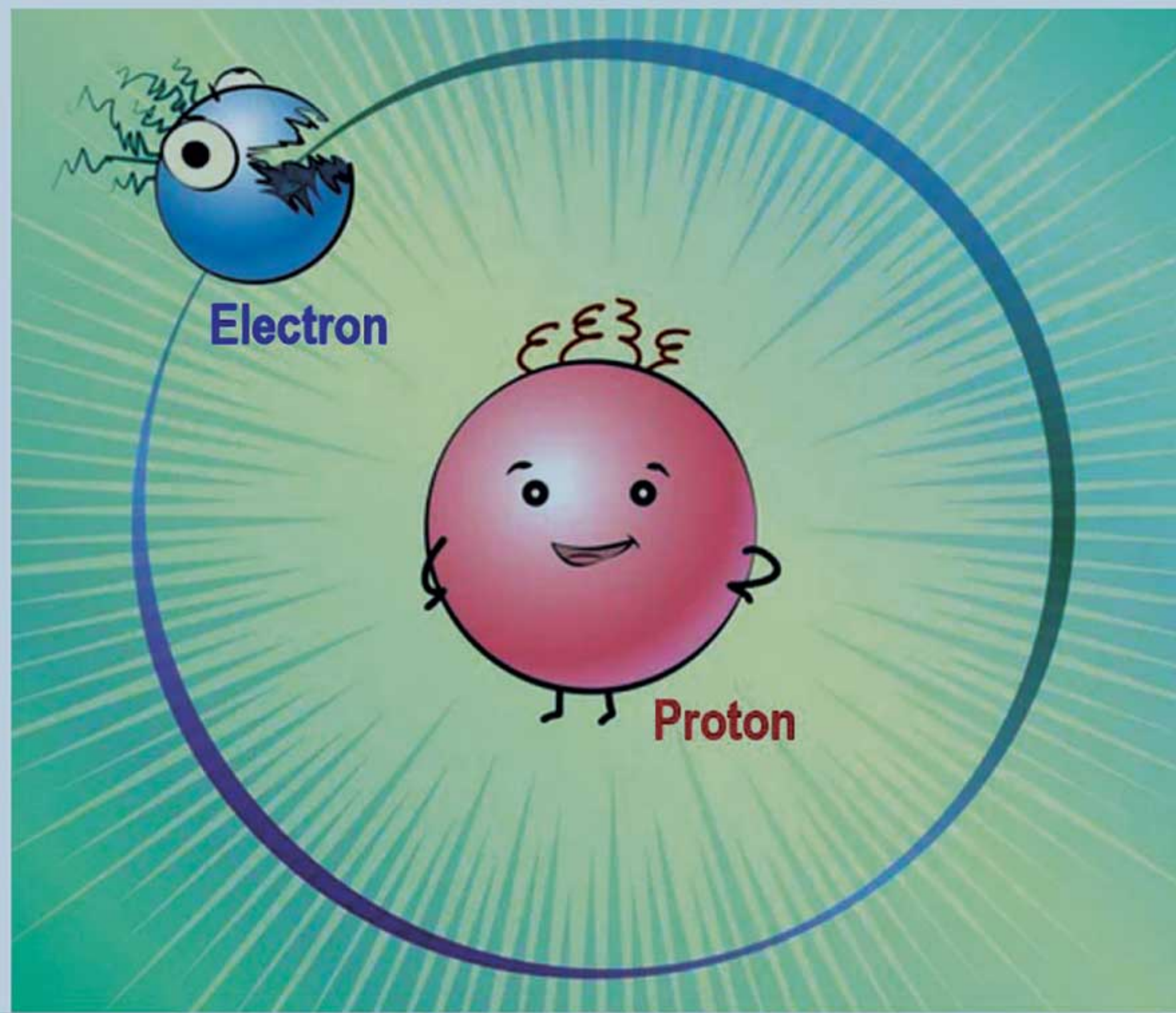
This year marks a joyful new chapter as you embrace fatherhood to three beautiful children, a role that reflects your dedication and love beyond the workplace.

Your creativity and vision have added a unique spirit to our Group of Companies—through sports, art, and philanthropy—shaping milestones that will be remembered for years to come. We sincerely thank you for inspiring us with your innovative ideas, compassionate leadership, and commitment to making a difference in both our workplace and our communities.

May this birthday bring you happiness, fulfillment, and strength as you continue to balance family, creativity, and leadership.



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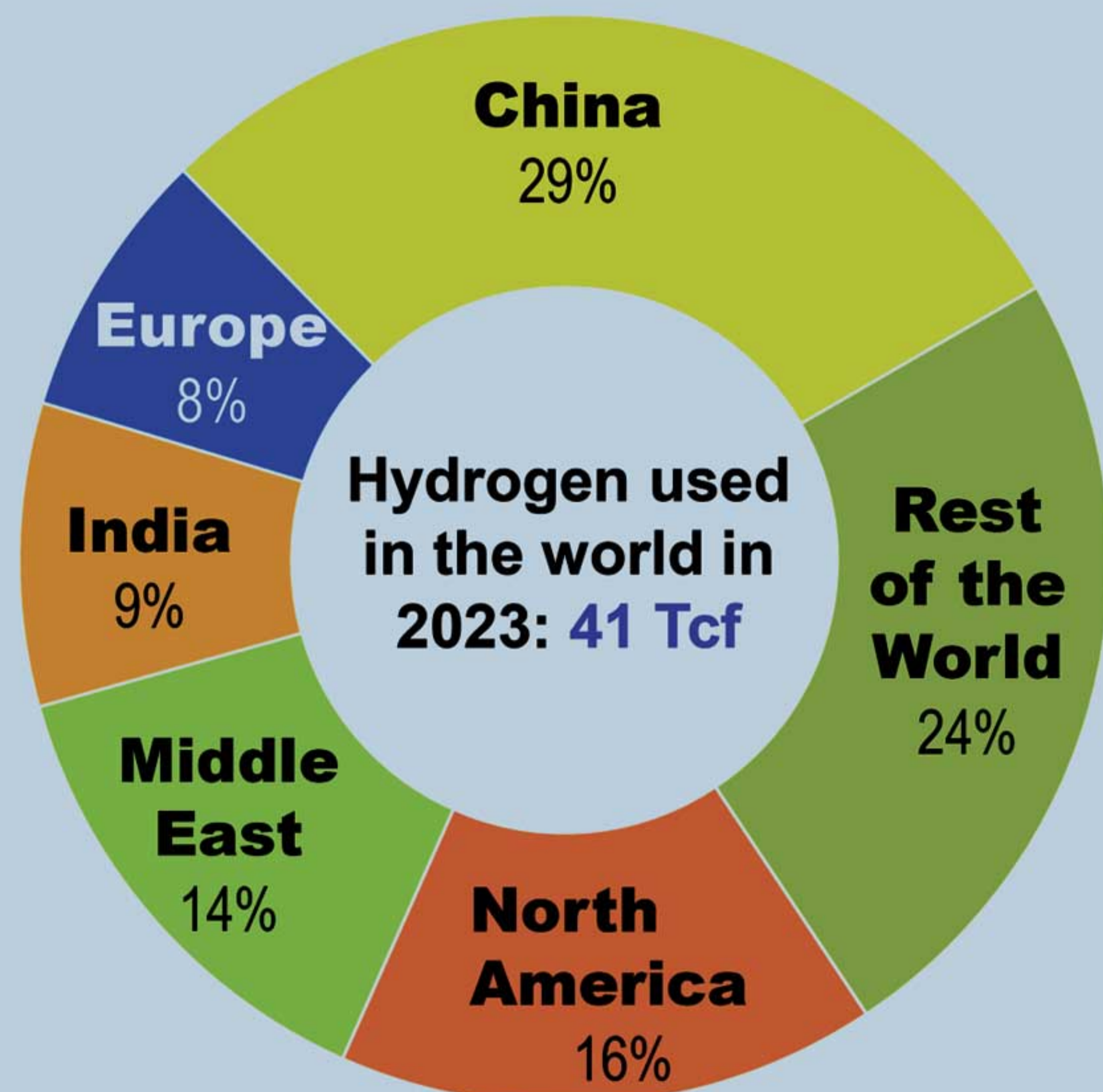
Modified from depositphotos_388029806-stock-illustration-cartoon-hydrogen-atom-vector-illustration.jpg (600x600)

Figure 1. An atom of hydrogen

The "Colors" of Hydrogen

While the gas itself is colorless, hydrogen production is categorized by "colors" to describe its environmental footprint:

- **Gray:** Produced from the breakdown of methane with steam. Methane is a molecule made of one atom of carbon surrounded by four atoms of hydrogen. Accounts for 99 percent of world production. This gray color turns to blue if the released carbon gas is reinjected in the ground.
- **Green:** Produced by breaking down water with electrolysis using renewable energy. Water is made of one atom of oxygen paired with two atoms of hydrogen. However, this hydrogen is only as green as the electricity used in the process, such as provided by wind, sun or hydro-electricity.



Modified from fig. 2.1 of IEA's Global Hydrogen Review 2024

Figure 2: Hydrogen use per region

Other colors indicating other methods are locally used depending on resources, supply chains and the end use of hydrogen, such as:

- **White:** Produced from underground geological sources. This is our focus of interest today.
- **Black or brown:** Produced when coal or lignite is converted into gas.
- **Pink or purple:** Produced through electrolysis powered by nuclear energy.
- **Orange:** Produced when microbes break down oil in depleted petroleum fields.

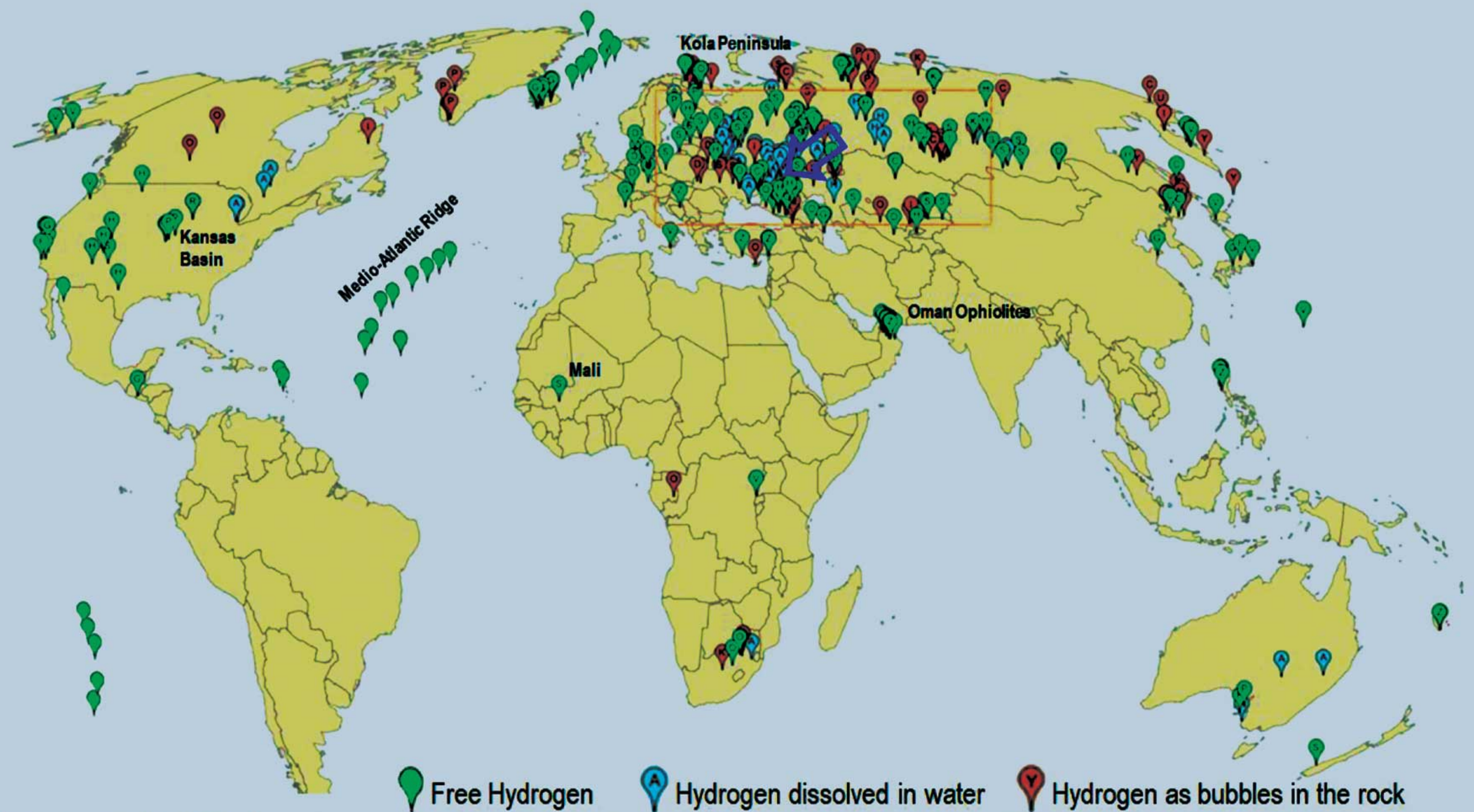
How costly is hydrogen? The price depends on the source. Green hydrogen is expensive, ranging from \$14 to \$28 per thousand cubic feet, due to the large amounts of renewable power needed for electrolysis.

But let's focus on the white (geological) hydrogen that is found in the underground: where, what and how is it found?

White Hydrogen in More Detail

Driven by the need for less carbon-intensive energy, an increasing number of studies and field investigations now show that white (geological) hydrogen may exist in the subsurface in potentially commercial quantities in relatively common environments. These landscapes are drastically different from where petroleum is explored and produced. While still rare, its promise is intriguing.

Why is geological hydrogen in economic amounts still a rarity? Millions of wells have been drilled for oil and gas worldwide, yet very few have reported measurable quantities of hydrogen. As a result, many petroleum experts have long argued that hydrogen is simply too diffusive to be present in economic amounts in the Earth's subsurface.



Modified from Zgonnik V. (2020): The occurrence and geoscience of natural hydrogen: A comprehensive review, Earth-Science Reviews 203 (2020) 103140; <https://doi.org/10.1016/j.earscirev.2020.103140>

Figure 3: Occurrences of geological hydrogen worldwide; the blue arrow points to the location of figure 4.

If no one deliberately looks for hydrogen, it often goes unnoticed. For decades, it was dismissed as too diffusive to accumulate underground. Yet natural sources of hydrogen have been documented for more than a century.

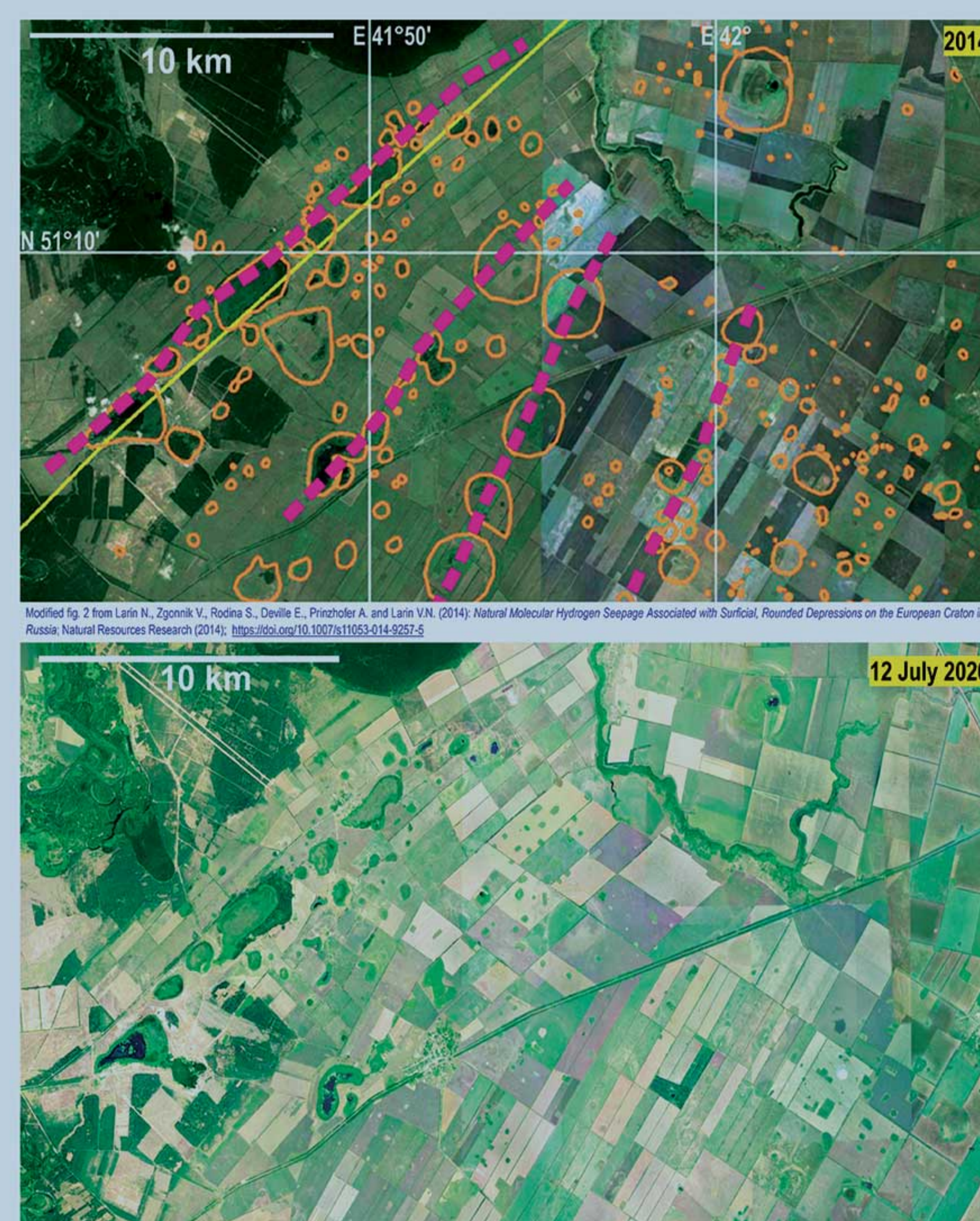


Figure 4: Fairy circles indicating seepage of hydrogen in a location in central Russia. Top: Russian paper, 2014, with orange outlines of fairy circles, the purple lines are fault traces reaching surface through the underground. Bottom: satellite image, 12 July 2020, showing the persistence of these circles.

Where has hydrogen been found so far? Figure 3 shows a map of the world where hydrogen is mentioned in scientific papers. The compiler of the map wrote: "If no one expects to find free hydrogen, no one samples for it." This bias affects not only how gas samples are collected and analyzed, but also how detection systems are designed. As a result, hydrogen is often missing from the list of gases measured by instruments on the market.

A notable exception is Russia, from the times it was known as the USSR. The striking density of points in Eastern Europe and Western Russia reflects a deliberate search for hydrogen. Russian geologists also discovered that geological hydrogen is often associated with round hollows, ranging from the tens to thousands of meters wide, where hydrogen seeps from underground (see figure 4). They dubbed these telltale signs of escaping hydrogen "fairy circles".

A well drilled in the Kola Peninsula in northern Russia attempted to reach a key discontinuity in the Earth's crust. It reached a depth of 12 kilometers, a world record, before being abandoned in 1989 after 19 years of operations. Reports suggested that significant amounts of hydrogen were encountered near the bottom, enough to fuel the drilling site.



US DOE convenes workshop with Oman on geologic hydrogen - Green Car Congress

Figure 5: Hydrogen bubbling in an Oman pond

So far, observations of white hydrogen have focused on three main types of geological landscapes: ophiolites, mid-ocean ridges, and ancient crystalline basement.

Ophiolites, such as those in Oman and Philippines, are suites of iron-rich rocks marking the remnants of ancient oceans that closed when continental plates crashed against each other. The hydrogen found in the ophiolites of Oman, in the southern Arabian Peninsula, is particularly striking. It bubbles up in small ponds of highly alkaline water (see figure 5).

As a reminder, *alkaline* is the opposite of *acid*, but it can be just as corrosive and skin-burning. Keep this "hyperalkaline" water feature in mind; it will come back further down as we visit one Myanmar potential hydrogen site.

Mid-ocean ridges—such as the Mid-Atlantic Ridge and the African Rift—differ from ancient closed oceans. These are places where continental plates split apart, allowing hot magma beneath the Earth's crust to release gases, including hydrogen (see figure 6).

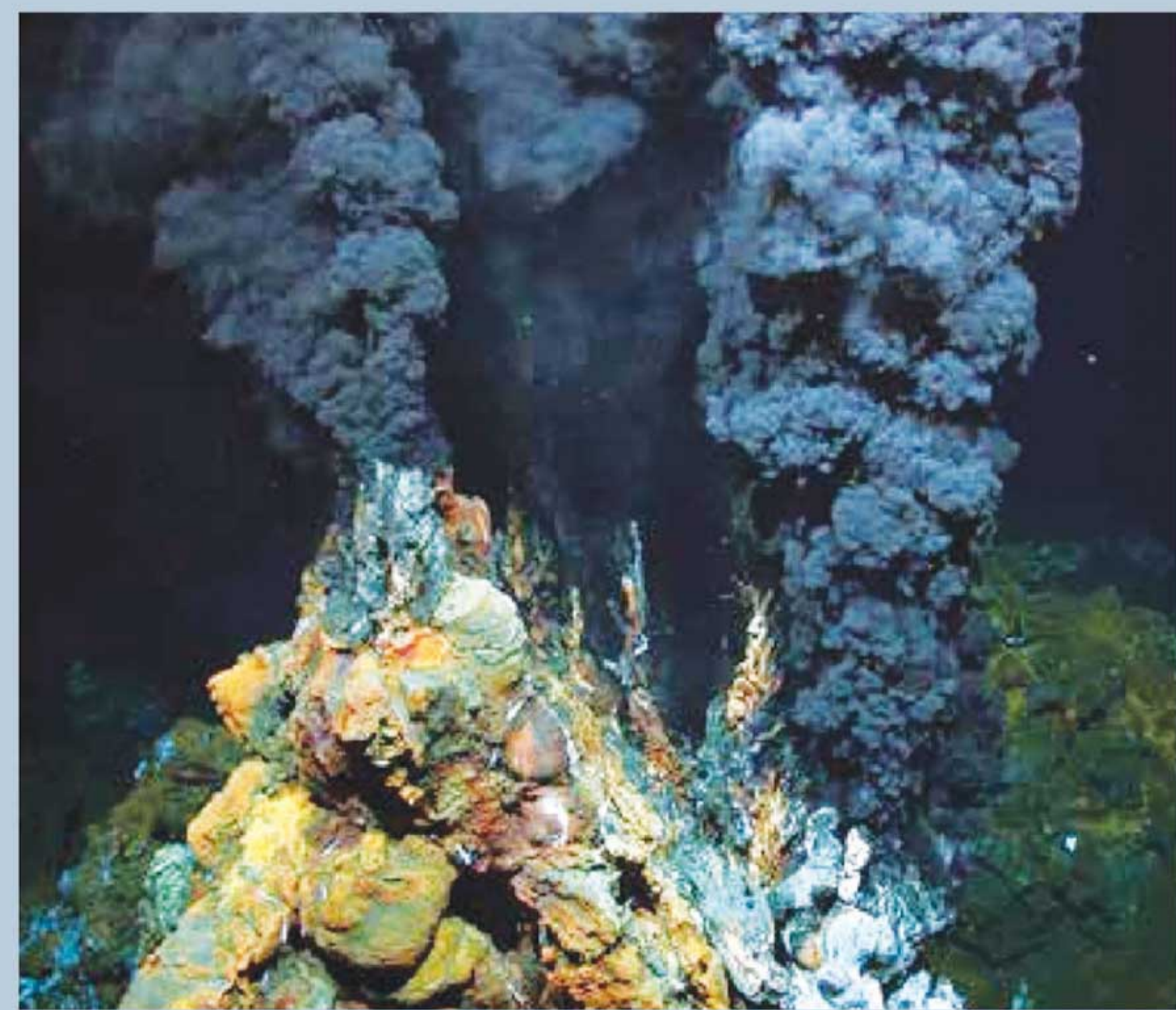


Figure 3.13 in Rogers, A.D., Brenley, A., Croft, P., Cunha, M.R., Danovaro, R., Devey, G., Hoel, A.H., Ruh, H.A., Sarradin, P.-M., Trevisanet, S., van den Hove, S., Veira, H., Visbeck, M. (2015) *Delving Deeper: Critical challenges for 21st century deep-sea research*. Larkin, K.E., Donaldson, K. and McDonough, N. (Eds.) Position Paper 22 of the European Marine Board, Ostend, Belgium. 224 pp. ISBN 978-94-920431-1-5

Figure 6: Gases, including hydrogen, bubbling in the bottom of ocean ridges; shown here beneath 2,890 meters of water in the Middle-Atlantic Ridge.

Ancient crystalline basement, found in places such as Australia, Brazil, Mali, and Russia, can also generate hydrogen. Water circulating into faults reacts with ancient magmatic rocks, which originally formed from molten material that occasionally erupted through volcanoes. The gas released during this process is hydrogen.

Among this landscape, one interesting hydrogen project is the Bourakebougou micro-power plant in Mali (West Africa), the only economic hydrogen-fed power plant in the world. Since 2012, hydrogen from one of the wells drilled in the area has fueled a turbine that powers a village of about 1,500 people.

Ironically, the discovery of this hydrogen was an HSE accident during a 1987 drilling campaign for water. A



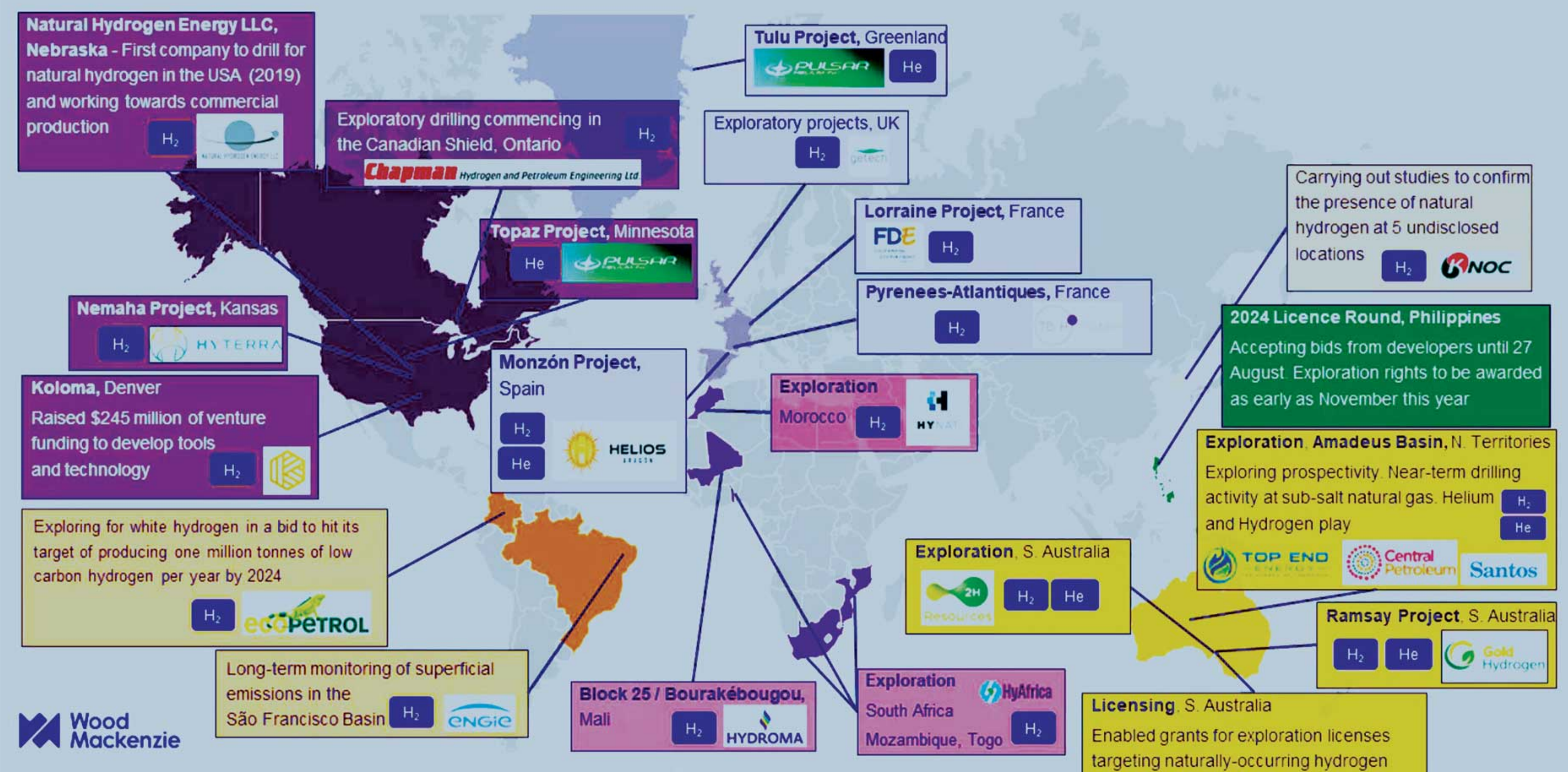
Natural hydrogen exploration: where do we stand? Gabór Tan - Group Chief Geologist - Vienna University, 10 October 2024. - Powerpoint Presentation

Figure 7: The Bourakebougou hydrogen field in Mali (West Africa)

well suddenly caught fire when a driller—who was smoking a cigarette—ignited the gas. He was severely burned, but the incident led to the realization that the well was releasing hydrogen.

It took an entrepreneurial local engineer to find out that the gas was 98 percent pure hydrogen. Seizing the opportunity, he founded a company to explore and produce the resource, particularly to power the nearby village.

As of 2024, active exploration campaigns for hydrogen were ongoing in quite a few countries; figure 8 tells more stories.



White hydrogen: 5 of the most critical questions answered | World Economic Forum

Figure 8: Hydrogen exploration throughout the world in 2024

What Are the Ingredients in a Hydrogen Geological Play?

Just like oil and gas pools, a hydrogen accumulation requires a source rock feeding a porous and permeable reservoir rock through migration into a pre-existing trap capped by a tight seal rock (see figure 9).

The main difference between a geological hydrogen play and a petroleum play is the location of the source rock. In hydrogen plays, the source rock is mainly within the basement underlying the sedimentary basin. In petroleum plays, by contrast, the source rock is located within the basin itself.

One key concern for the economics of hydrogen is production flow. Although very few data have been published, available evidence suggests that hydrogen flows are about 10 to 100 times lower than

those of economic natural gas. However, unlike natural gas, hydrogen flows appear to decline very little over time.

The only well that has been continuously monitored, the one powering the village micro-plant in Mali, has shown no decline in flow since 2012. This strongly suggests that the well taps into a "live" geological play, where hydrogen is continuously replenishing the reservoir.

In summary, the presence of geological hydrogen requires three key features:

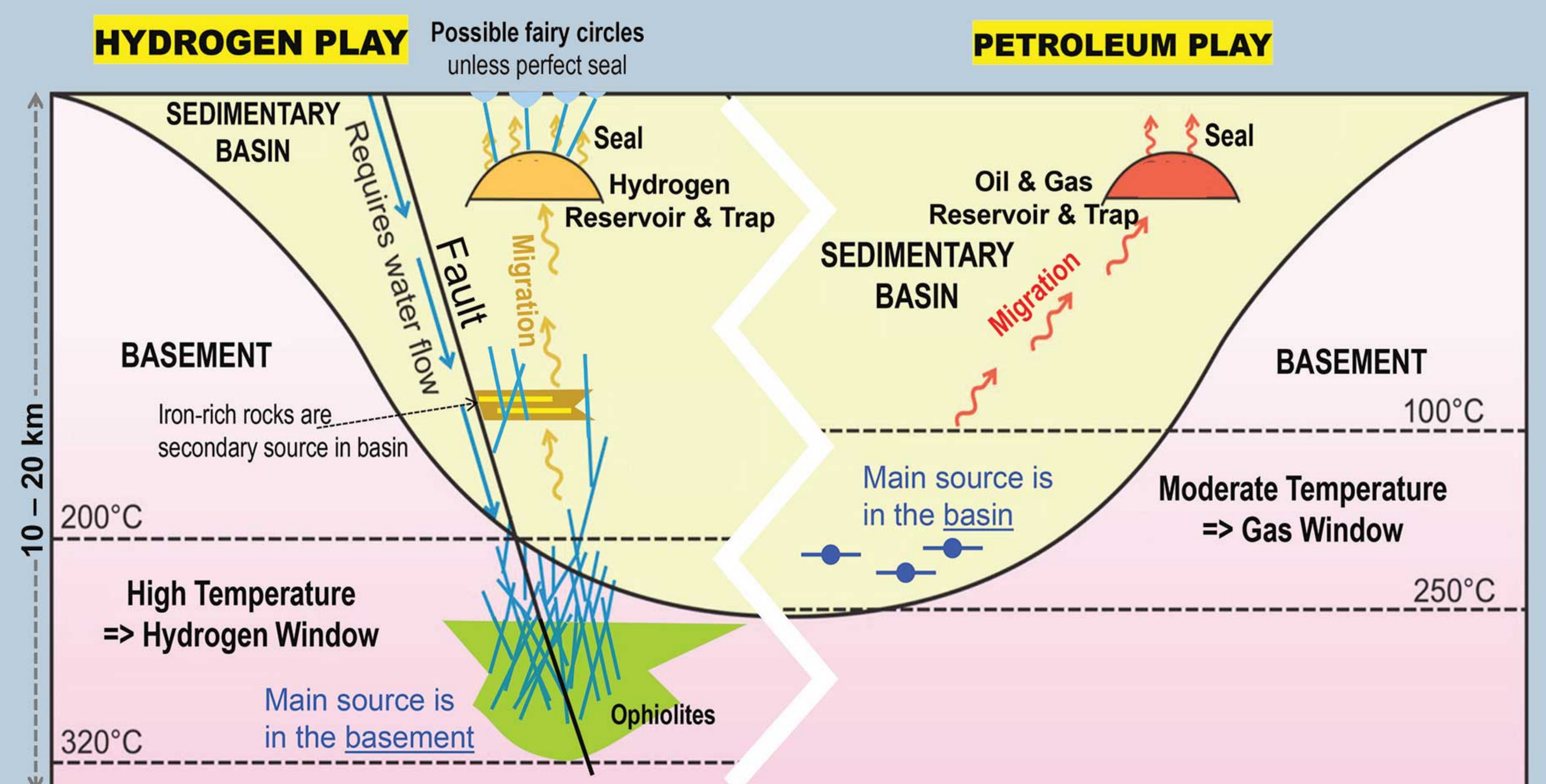
- Iron-rich rocks
- Abundant groundwater
- Deep-seated faults to allow water circulation downward and hydrogen migration upward

These three features are well documented in Myanmar. So, what's in it for us?

Is There Any White Hydrogen in Myanmar?

To be clear, there is currently no published evidence of geological hydrogen seepages in Myanmar. That does not mean it is absent, only that it appears never to have been explored.

A cursory review of geological literature and satellite imagery on Google Earth revealed several intriguing hints. One, however, stands out: the dormant volcanoes north of Monywa, across the Chindwin River (see figure 10).



Modified from Jackson O., Lawrence S.R., Hutchinson I.P., Stocks A.E., Barnicoat A.C., Powney M. (2024). *Natural hydrogen: source, systems and exploration plays*; *Geoenergy* 2024-002; <https://doi.org/10.1144/geoenergy/2024-002>

Figure 9: The ingredients of the geological hydrogen play vs the petroleum play

From front desk duties to high-level negotiations, Daw Thandar's career path at MPRL E&P is a story of seizing opportunities and building bridges across different work cultures, partners, and government authorities, all while wearing multiple hats with confidence. Curious how she did it? Let's dive in.

You've been with MPRL E&P since 2006, nearly two decades! What first brought you here, and how has your journey unfolded?

I started in February 2006 as a receptionist/secretary. A few months later, I was asked to cover for an Executive Secretary on maternity leave. That opportunity opened the door to bigger responsibilities, and from there my journey kept evolving. Over the years, I moved through roles like Admin & Contracts Officer, then into the Exploration & Joint Venture Department as a JV Business Coordinator. Since 2019, I've been serving as Joint Venture Business Manager. Today, I coordinate joint operations, work closely with partners and government authorities, and oversee compliance, reporting, and budgets. It's been quite a journey of growth and learning!

What drew you specifically to the Joint Venture (JV) side of the business?

When I worked in Admin & Contracts, I frequently had to work closely with third-party service contractors and government stakeholders, especially Myanmar Oil & Gas Enterprise (MOGE). Those interactions sharpened my coordination skills and naturally guided me toward JV management. In this role, I've been able to broaden my expertise to navigate more complex dimensions like partners, contracts, regulations, and operations. While it can be challenging to align between the parties including technical teams, internal management, and external stakeholders such as government authorities, which is also deeply rewarding to balance between them and working together toward shared success.

Which subjects helped the most in preparing you for this role? And what would you recommend to someone aiming to follow a similar path?

My first degree was a B.A. in English (2005), followed by a Master's in Development Studies from Yangon University of Economics in 2018. Along the way, I also invested in continuous professional development, earning a Diploma in Corporate and Business Law from City of Oxford College, a Diploma in Business Administration, and an International Diploma in Computer Studies. The Development Studies program sharpened my understanding of how social and economic forces intersect, while the business-law diploma has been invaluable in navigating contracts and compliance.

For anyone aspiring to follow a similar path, I would recommend pursuing studies that combine business, law, and development, also strengthening communication skills in English and building strong stakeholder engagement capabilities, both are absolutely essential.

If you were hiring someone for your team, what qualities would you look for?

Beyond technical knowledge, collaboration is key. I'd look for someone who can communicate clearly, stay organized, adapt under pressure, and balance assertiveness with diplomacy. In this role, you're constantly aligning internal teams with external partners and government regulators, so people skills matter just as much as technical ones.



I am so intrigued by your role! You seem to wear many hats, so tell me, what does a typical day look like for you?

A typical day in my role as a JV Business Manager is really a blend of several roles. I act as a government engagement officer, maintaining regular communication with key stakeholders and government entities. I also serve as a contracts officer, overseeing the Production Sharing Contract (PSC), related agreements, and service contracts. As a compliance officer, I monitor day-to-day operations to ensure everything aligns with the PSC, which governs all activities. On top of that, I take on the role of a reporting officer, preparing and submitting regular reports to the government and obtaining the necessary approvals. When joint venture partners are involved in a project, I also act as a coordinator, working closely with them to align their objectives with internal management. In short, my day is about balancing these responsibilities to keep operations running smoothly, relationships strong, and compliance, reporting, and partner expectations fully on track.

From my understanding, it seems like you work across both technical and non-technical areas. What part of your job do people often misunderstand?

One key part of my role is obtaining government approvals for service contract awards. The recommendation documents usually include both technical and commercial evaluations, which means I have to present them to different teams at MOGE. When I meet with technical personnel, they often ask detailed engineering questions, so I work closely with our internal Technical Team to provide accurate answers. On the other hand, when I meet with finance personnel, I need to justify the commercial evaluations and cost considerations. Even though I'm not an engineer or finance professional, people sometimes assume I have that background. This "bridge role" is often misunderstood, but it's actually one of the most important aspects of government engagement.

I can see that happening a lot in your role where you have to act as a kind of "translator." You've also mentioned bridging gaps between international partners and government processes. What challenges come with that?

One of the biggest challenges is aligning timelines. Internally, our management process is very structured, and approval process mirrors the government procedures. In contrast, our JV partners, as international O&G players, are used to more flexible and independent decision-making, which can be very different from our systematic, formal approach.

To keep things smooth, I spend time explaining Myanmar's management culture and government approval "red lines" to JV partners so they fully understand why certain steps take more time. By creating this shared understanding, I help bridge the gap between different systems, making collaboration more efficient and respectful of everyone's processes.

With so many stakeholders involved, and a lot of sensitivity at times, what's your secret to building strong relationships?

Coordinating across different parties requires patience, cultural awareness, and consistency. With government officials, it's important to respect formal processes, provide complete documentation, and be very clear and transparent in communication. With JV partners, the challenge is helping them understand the Myanmar management style and the realities of government approval processes, which can be more layered and time-consuming than what they're used to.

For me, the key qualities are empathy and trust-building. I try to see things from each stakeholder's perspective, whether it's a government committee asking technical questions, a Finance Team reviewing commercial justifications, or a partner eager to move quickly. By listening carefully, explaining openly, and following through commitments, I create an environment where everyone feels respected and understood. Over time, this consistency builds strong, long-lasting relationships, even when processes are complex.

Tender processes can be long and detailed. What has your experience been like managing them, and what lessons have you learned along the way?

My experience has taught me that success depends on thorough preparation and clear documentation. From drafting tender documents to coordinating

technical and commercial evaluations, every step must be carefully planned and recorded. I've also learned that proactive communication with stakeholders, both internal and external, helps prevent delays.

This is so enlightening to me! Let's talk about negotiating contracts. What have you found helps ensure fairness and transparency with different stakeholders and partners?

During negotiations, I focus on creating a balance where all parties feel their priorities are respected. The key is clarity and consistency: clear evaluation criteria, consistent communication, and proper documentation make the process transparent for everyone involved. Open discussions with partners and government officials help to address concerns early and avoid misunderstandings. This approach allows negotiations to move forward fairly, with trust and confidence on all sides.

Have you noticed any changes in how tender processes or contract negotiations are handled today compared to earlier in your career?

Oh yes, there have been significant changes. In the past, there was no formal tender evaluation team in place. As a Contract Officer, I would prepare tender documents and consult separately with different departments, for example, a drilling engineer would prepare the scope for drilling services, while the finance manager would provide input on compensation matters. My role was to combine everything across departments and then seek ap-

proval from both internal and external authorities. Today, it has been more structured. A formal Review Team (RT) is established to review tender and contract documents collectively, ensuring that everything is aligned and properly evaluated before moving forward. This has made the process more transparent, consistent, and efficient.

Earlier in my career, I focused mainly on service contracts. Now, with the Pyitharyar Integrated Project, I am also part of the engagement team negotiating the commercial agreements with government and external stakeholders. This exposure has been a valuable experience, broadening my perspective beyond service contracts and giving me deeper insight into high-level negotiations and stakeholder collaboration.

I am curious to know, what personal skills or mindset have helped you most when dealing with government stakeholders or navigating complex regulations?

The most important skills have been patience, adaptability, and understanding the process. Government procedures often involve multiple layers of review and can take time, so I've learned to stay patient while keeping things moving. I also approach every interaction with transparency and cultural awareness, making sure I present information in a way that aligns with government priorities. With that, building trust through consistency and reliability has helped me navigate even the most complex regulations.

Looking back, what moments stand out as career highlights?

Definitely my involvement in the Pyitharyar Integrated Project, where I am part of negotiation team in high-level commercial agreements with government and external stakeholders.

It was both a challenge and a valuable growth experience, as it gave me deeper insight into strategic negotiations. More broadly, I'm proud of how I've grown with MPRL E&P over the years, starting as a receptionist and steadily advancing to Joint Venture Business Manager. That journey is very meaningful to me, as it shows my resilience, adaptability, and the trust the company has placed in me.

That's truly inspiring. Before we wrap up, tell us something most people don't know about you.

Before oil and gas, I worked as an IT trainer and in tourism. Teaching gave me communication skills I still rely on, and tourism nurtured my love of travel—which fits perfectly with my current role that often involves business trips.

And here's a fun fact: I still love teaching! Whenever I can, I mentor others and share knowledge in the workplace.

Thank you, Daw Thandar. Your story is a great reminder that career growth is about curiosity, adaptability, and the courage to take opportunities as they come. ■

From Page 17

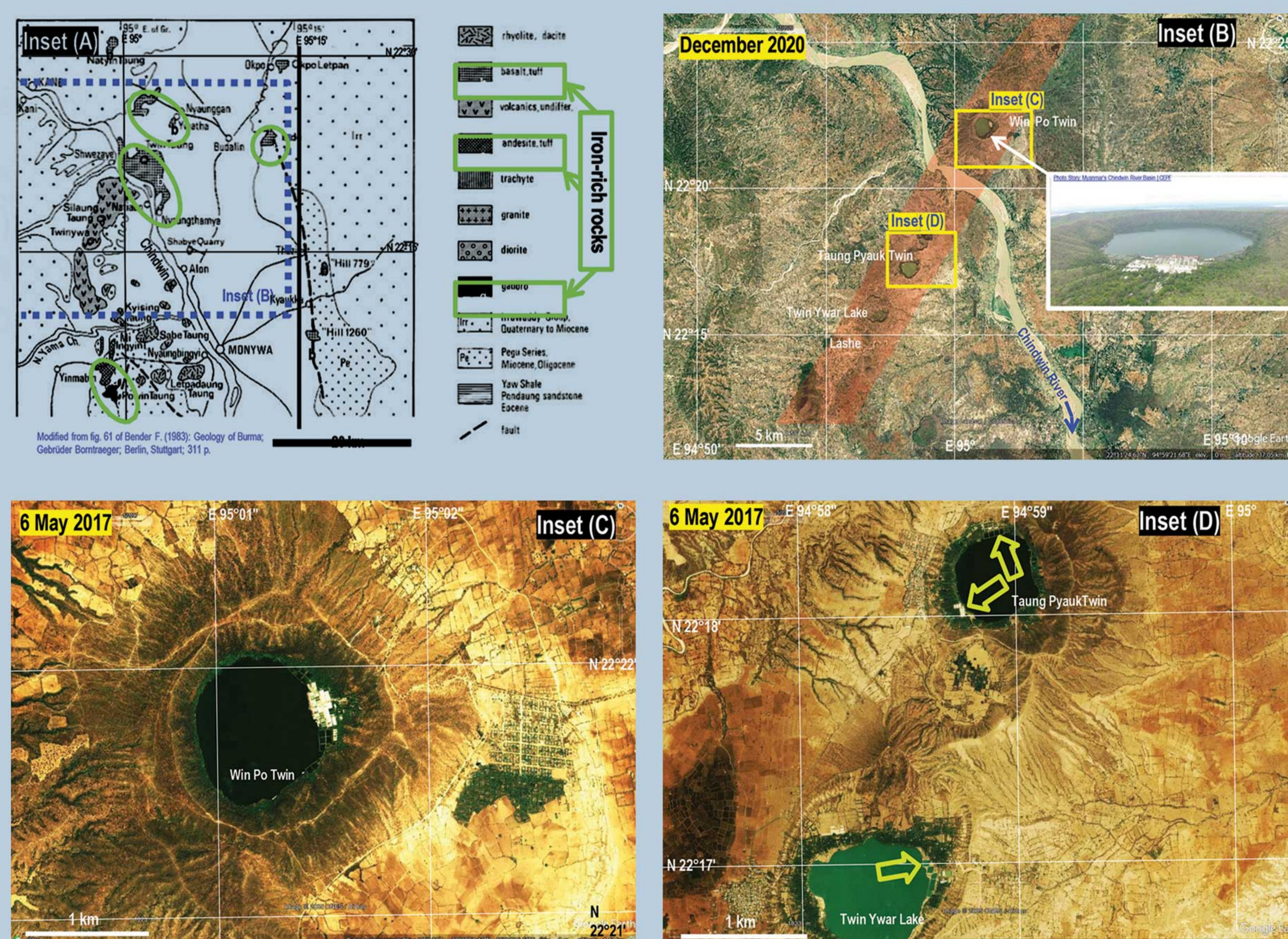


Figure 10: Dormant volcanoes near Monywa and their Spirulina pools. Inset (A) shows the geological map of the area, illustrating surface rock formations. Inset (B) shows a satellite image with the volcanoes aligned northeast–southwest; note the Spirulina farm in the crater lake of Win Po Twin volcano. Insets (C) and (D) show details of two volcanoes, with light green arrows marking Spirulina farms that indicate hyperalkaline crater lakes.

These relatively young volcanoes, composed of basalt, an iron-rich rock, last erupted 250,000 to 500,000 years ago, which geologists jokingly call “this morning after breakfast.” They are also clearly aligned along a deep-seated fault trend.

Interestingly, these volcanoes are already known in Myanmar for Spirulina farming in crater lakes that remain permanently filled with water. Spirulina, a blue-green algae rich in protein, is used in both cosmetics and nutritional supplements. What makes it

particularly relevant here is that Spirulina thrives in hyperalkaline waters.

Iron-rich rocks, deep-seated faults, hyperalkaline waters—don't these sound like some of the right ingredients for a hydrogen play?

The answer to the question posed in this section is that geological hydrogen is likely present in Myanmar. Whether it exists in significant, economic amounts is a story that requires much more fieldwork.

Quite a few countries across the world have launched deliberate searches for geological hydrogen as an industrial resource. Yet hydrogen is elusive and difficult to trap beneath a tight seal.

To make the best use of resources, hydrogen should be included as part of broader exploration efforts. Field campaigns in favorable geological landscapes—designed to sample water and soil for unusual concentrations of elements—should also include hydrogen testing. And who knows? Serendipity may reward the inquisitive, tenacious, and open-minded explorer with another new resource to help build prosperity in the country.

Want to know more? For a broad overview, you may quench your curiosity in *Hydrogen production* on Wikipedia. Techies may want to look at the following paper for a most comprehensive review of geological hydrogen: Zgonnik, V. (2020). *The occurrence and geoscience of natural hydrogen: A comprehensive review. Earth-Science Reviews, 203, 103140.*

That's it for now folks! So long and may the fun go on! ■



From NOC to CCIE: A Milestone for U Shwe Min Soe and M&A Telecoms

Aung Myin



In today's fast-evolving digital landscape, staying ahead requires more than just experience—it demands world-class expertise, continuous learning, and a commitment to excellence. At M&A Telecoms, we are proud to announce that U Shwe Min Soe, a dedicated NOC Engineer who has been with the company for nearly a decade, has recently achieved the prestigious Cisco Certified Internetwork Expert (CCIE) certification in Enterprise Infrastructure—marking a significant personal and organizational milestone.

His official certification number is CCIE#69143, verifiable through Cisco's CCIE database—a testament to his elite-level technical expertise.

The Pinnacle of Network Certification: What Is CCIE?

The CCIE (Cisco Certified Internetwork Expert) is the highest level of technical certification offered by Cisco Systems and stands as one of the most respected credentials in the global networking industry. Introduced in 1993, the CCIE program is widely regarded as the gold standard for expert-level skills across enterprise networking, security, service provider, and infrastructure technologies—much like an MBA in the networking world.

Unlike the CCNA (Cisco Certified Network Associate)—an entry-level certification covering foundational networking concepts, and the CCNP (Cisco Certified Network Professional)—an intermediate-level credential that deepens knowledge in specific areas, the CCIE is reserved for senior engineers with advanced capabilities. Earning this elite credential requires passing a challenging written exam followed by an intensive 8-hour hands-on lab that tests real-world, scenario-based skills in network design, troubleshooting, and DOO—Deploy, Operate, and Optimize.

U Shwe Min Soe completed his CCIE lab at Cisco Systems, Singapore, a location known for its tough standards and competitive environment. Globally, fewer than 3% of Cisco-certified professionals hold the CCIE credential, making this achievement both rare and prestigious—the result of years of practical experience, rigorous preparation, and unwavering dedication.

A Journey of Dedication and Growth

The path to CCIE is never easy—and for U Shwe Min Soe, it demanded immense personal sacrifice and unwavering focus.

He spent nearly 20 months preparing for the exam, dedicating every spare moment to study. Each weekend, he joined a rigorous 8-hour online training program—split across four hours on Saturday and four on Sunday—never missing a single session. In fact, he consistently logged in 30 minutes early to engage with his tutor, ask questions, and exchange insights with fellow candidates.

U Thein Soe Htike, General Manager of M&A Telecoms, stated: "This is a proud moment for our Technical Team. U Shwe Min Soe's CCIE certification demonstrates what's possible when skill meets perseverance. His success sets a benchmark for others and reaffirms our belief in nurturing top-tier engineering talent."

Pursuing this goal meant making tough personal choices. U Shwe Min Soe openly shares that he was unable to give enough time to his family during this period. He also invested his hard-earned savings into the journey—a testament to how seriously he pursued the world's most respected networking certification.

His ability to pass the CCIE exam on the first attempt speaks volumes about his discipline, resilience, and passion for excellence.



Nearly a Decade of Contribution to M&A Telecoms

U Shwe Min Soe has been an integral part of M&A Telecoms since its early days. He joined the company on 15 July 2015 at just 25 years old, not long after M&A Telecoms was founded. Starting his journey in the Network Operation Center team, he quickly demonstrated his commitment, technical aptitude, and growth mindset.

His career progression reflects his dedication:

- 11 July 2016 – Promoted from Customer Support to Assistant Engineer
- 01 May 2022 – Promoted to Network Engineer

From his beginnings in the NOC (Network Operations Center) team to becoming a certified CCIE (Cisco Certified Internetwork Expert), U Shwe Min Soe's journey is a testament to his continuous learning and contributions to the growth of M&A Telecoms. His nearly ten-year journey represents not only personal achievement but also the long-term commitment that powers our organization forward.

U Aye Ko, Operations Manager of M&A Telecoms, stated: "We're proud to celebrate a major milestone as U Shwe Min Soe earns his CCIE certification—one of the most prestigious in networking. His achievement reflects the dedication and technical excellence of our NOC Team."

Congratulations, U Shwe Min Soe—you've made M&A Data Center proud!"

What This Means for M&A Telecoms

As the demand for secure, high-performance, and always-on network infrastructure continues to rise, having a CCIE-certified expert in our NOC team reinforces our ability to deliver exceptional service. His expertise empowers us to:

- Improve network reliability and uptime through faster, more precise issue resolution
- Design and scale complex architectures following global best practices
- Further solidify our position as a trusted telecom and infrastructure partner

In a field where technical excellence sets companies apart, this achievement enhances both operational performance and client confidence—and affirms the value of our long-term commitment to nurturing talent that grows with and for the company. ■

"His success sets a benchmark for others and reaffirms our belief in nurturing top-tier engineering talent."



From Mini-Library to Community Learning Hub: Storytelling and Creative Flourish at Thuta Pinlel

Pyae Pyae Phy

At the heart of Gaw Yan Gyi Island, the Thuta Pinlel Library has grown from a simple book-lending space into a lively gathering place where children come to explore, imagine, and learn together.

Launched by M&AOSB's CSR Program in March 2024, the library now holds more than 431 books, records 334 borrowings, serves 71 active members, and welcomes young readers every weekday. Through the Book Request Program, its shelves are constantly refreshed with titles chosen by the community—making it truly a library shaped by its readers.



Guardians of the Shore – July 2025



July's session shifted to the shoreline with Mangrove Conservation Knowledge Sharing Session. Children explored how mangroves shield against storms, provide habitats for marine life, and store carbon to fight climate change. The message was clear: environmental stewardship begins with awareness, and even young voices can advocate for change.

The Heart of Learning



Since May 2025, the library has hosted monthly Storytelling and Creative Learning Sessions designed to nurture reading habits, spark creativity, and foster a lifelong love of learning. These sessions inspire children to think critically, care for their environment, and believe in their own creative voices.

Celebrating Creativity – August 2025



In August, creativity took center stage. Children used paper, coloring pencils, flowers, petals, grass, and leaves to craft artwork—and then wrote stories to match their creations. The library became a gallery of vibrant illustrations and playful narratives, each one proof of how imagination builds confidence and originality.

Stories with a Moral – May 2025



The first session brought familiar tales to life. The Fox and the Grapes taught perseverance and avoiding excuses, while The Thirsty Crow showed how clever thinking solves tough problems. One child told the story, others listened, and together they discussed the lessons. Characters became friends, and morals became promises the children could carry into daily life.

Learning from the Ocean – June 2025



In June, the library transformed into an underwater classroom for the Coral Reef Conservation Knowledge Sharing Session. With coral samples, visuals, and videos from the Coral Reef Conservation Pilot Project in Gaw Yan Gyi, children discovered how coral reefs protect coastlines, support fish populations, and sustain livelihoods—learning why conservation is vital for their community's future.

Beyond the Pages



What began as a modest mini-library has blossomed into a dynamic learning hub where children in Gaw Yan Gyi not only learn to read but also dream, create, and care for the world around them. For M&AOSB, the Thuta Pinlel Library is more than a CSR initiative—it is a long-term investment in the community's potential, cultivating skills, knowledge, and values that will last a lifetime. ■

SKILL-HONOUR-ABILITY
ကျွမ်းကျင်-ရိုးသား-စွမ်းရည်ဖြင့်မား

Vision
1. Foster an system of competence excellence, with workers learning for life and advancing with skills throughout the world.
Mission
1. To produce the technical skilled worker as the driving power of national industrial development and to meet them to appropriate levels of career interest.
2. To ensure continuous of demand and supply of qualified knowledge workers.
Objectives
1. Creation of technical related management annual plan.
2. Creation of job opportunities for youth to take up technical employment.
3. Arrangement of technical related workers to take the best career.
4. Advancement of productivity and quality control techniques at the factory.
5. Introduction of research and development activities for the establishment of competitive things and to represent the innovation approach for the future.



Scholarships Power Future Careers for Mann Field Youth

Moe Thu Zar Soe

As Myanmar works toward inclusive and balanced development, particularly in the agriculture, live-stock, and industrial sectors, the demand for skilled labor has never been greater. In line with the National Comprehensive Development Plan (NCDP), which targets annual industrial growth of 5%–6% by 2030, equipping young people with practical, industry-ready skills is essential to sustainable progress.

Yet one of the country’s most pressing challenges is the shortage of technically trained workers. With only 0.13% of the population completing Technical and Vocational Education and Training (TVET), a critical gap in human resource capacity remains.

To help close this gap, MPRL E&P has taken meaningful action through its CSR Program. The company’s scholarship initiative provides access to vocational training for youth from Mann Field, opening doors to future-ready careers while improving community livelihoods.

Supporting Skill Development at No. 5 Industrial Training Center (Magway)

No. 5 Industrial Training Center (Magway), established in partnership with the Korea International Cooperation Agency (KOICA), is one of Myanmar’s premier TVET institutions. Since 2011, it has trained more than 1,800 students in specialized fields such as Computer-Aided Design and Manufacturing (CAD/ CAM) and Automobile Maintenance.

Scholarship Impact and Progress

To date, 28 students have been supported through the program. In the Academic Year 2025–2026, MPRL E&P expanded its support by awarding eight scholarships for Batch No. 13 at No. 5 Industrial Training Center (Magway). Seven recipients are youth from Mann Field Communities under the CSR Program, and one is a family member of a Myanmar Oil & Gas Enterprise (MOGE) staff member, supported under the MOGE Employee-Centered CSR Program.



Maung Min Htet Po, a scholarship recipient from Aye Mya Village, shared:

“One year ago, I thought I would have to start working immediately if I didn’t receive a scholarship. Now, I’m incredibly happy to continue my studies and pursue something I’m truly passionate about. Students from my village who received this scholarship in the past are already employed, which motivates me. I am deeply grateful to MPRL E&P for supporting young people like us and helping us achieve our dreams.” He added: “After I finish my studies, I plan to share the importance of industrial education with others in my village. Rather than staying with limited opportunities, they can gain practical skills that help them earn a living. As for me, I want to apply what I’ve learned to contribute to both my community and the country.”



Events

MPRL E&P's Compliance Department Delivers Code of Conduct Training to Staff and Service Providers



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This marks a significant milestone in MPRL E&P's ongoing investment in education and sustainable development. From three scholarships in 2019–2020, then seven, and five in subsequent years, the company has steadily expanded its support, reflecting its deepening commitment to community empowerment.

Building a Future-Ready Workforce

At the recent graduation ceremony of Batch No. 12, Union Minister for Industry Dr. Charlie Than emphasized that skilled labor is the foundation of national development. Echoing this, MPRL E&P's scholarship program is helping address the skills gap while contributing to broader socio-economic growth.

Another scholarship recipient, Ma Khaing Mar Wai from Ywar Thar Village, expressed:

"I've always had a strong desire to study, and I truly wanted this opportunity. I'm especially happy that MPRL E&P supports students who are eager to learn and committed to their education. My goal is to focus on my studies, share knowledge with other young people, enter the workforce, and eventually support my family."

By empowering local youth with technical education and practical skills, MPRL E&P's scholarship program reflects its vision of responsible business—creating shared value and fostering long-term impact in the communities it serves. ■



MPRL E&P Introduces Community-Managed Compost Station Project in Mann Field

Moe Thu Zar Soe

As the world increasingly turns to nature-based solutions to tackle waste, MPRL E&P's CSR Program is proud to make a meaningful contribution to the Mann Field Communities where it operates. In July 2025, the company launched the Community-Managed Compost Station Project at the household level in Mann Kyoe and Nan U Villages. This initiative empowers residents to manage organic waste sustainably and transform it into valuable compost through education, hands-on demonstrations, and active participation while also advancing broader environmental and public health goals.

A Global Problem, Local Solution

Urbanization worldwide has intensified waste management challenges. While cities struggle with growing volumes of waste, rural areas also face difficulties in handling organic and biodegradable materials. Garden trimmings, leftover food, and other organic waste are often discarded rather than recycled, leading to wasted resources and environmental risks.

According to the UN Environment Programme (UNEP), global municipal solid waste is projected to rise from 2.1 billion tons in 2023 to 3.8 billion tons by 2050. The direct cost of waste management in 2020 was USD 252 billion, increasing to USD 361 billion when including pollution, health, and climate impacts. By 2050, these costs could nearly double to USD 640.3 billion.

In Myanmar, organic waste accounts for 65–70% of household waste, much of which is openly dumped or burned, creating serious environmental and health challenges. Local initiatives such as Trash Hero Myanmar and township-level green projects have demonstrated that community-led composting is both feasible and impactful. These efforts support

Myanmar's National Waste Management Strategy (2018–2030) and the broader "Zero Waste Cities" vision, which emphasize community-based composting as part of the country's circular economy goals.

Community-Managed Compost Station Project in Mann Field

Since April 2019, MPRL E&P has supported a Community-Led Waste Management Program in Mann Field. By August 2025, the program had collected and managed 5,278 metric tons of waste. Building on this progress, the company introduced training on separating wet and dry waste for schools and villages, along with hands-on Bokashi composting workshops for farmers, which laid the groundwork for the new compost project.



"Turning waste into compost reduces trash, lowers air pollution from burning waste, saves costs on chemical fertilizers, and encourages cooperation and responsible behavior. Compost can be reused locally for gardens and farms," said U Saw Christopher, CSR Associate overseeing the project.

The project follows a three-phase approach to engage, educate, and empower communities in sustainable organic waste management. In July 2025, the CSR Team members met with Village Administrators, Village Development Committee members, and Community Volunteers to plan and launch the pilot program. Households received training on sorting organic waste, guidance on composting methods, and support in constructing and managing compost pits. Residents now actively monitor the composting process and will share the resulting compost once it is ready.

Community Volunteers, Trash Heroes, and CSR Team members also conducted door-to-door visits to raise awareness about compostable materials, environmental benefits, and collection schedules.



Voices from the Community

U Htun Hla Aung, a Mann Kyo Village Development Committee member, shared: “The company taught us how to turn leaves, fruit peels, and other organic materials from the village into natural compost. We applied it to our tomato field, and the plants grew healthy and yielded well. This project benefits both the environment and local farmers.”

Daw Nwet Thi, Village Administrator of Nan U Village, explained: “Previously, all waste was thrown away without sorting. Now, we understand that unwanted waste can be transformed into compost, and we are learning how to produce it using this method.”



Ma Phyu, a Community Volunteer in Nan U Village, highlighted the benefits: “By turning usable waste into compost, we can reduce trash, lower disposal costs, and cut transportation fees. This brings immediate, visible benefits to our village.”

Ma Hanni Soe Oo from Trash Hero Minbu added: “The project involves families, children, and youth. Learning to manage waste responsibly now ensures these practices continue for homes and the community in the future.”



Small Steps, Lasting Impact

The villages around Mann Field show that meaningful change often begins with small, community-led steps. When managed wisely, waste becomes a valuable resource, empowering households to take ownership of organic waste management while supporting both environmental stewardship and community development.

MPRL E&P’s pilot project demonstrates that even modest actions can create lasting impact. By turning household waste into valuable compost, Mann Field residents are protecting the environment, improving public health, and strengthening their communities. Indeed, big change often begins with small actions. ■



“In Myanmar, organic waste accounts for 65–70% of household waste, much of which is openly dumped or burned, creating serious environmental and health challenges. Local initiatives such as Trash Hero Myanmar and township-level green projects have demonstrated that community-led composting is both feasible and impactful. These efforts support Myanmar’s National Waste Management Strategy (2018–2030) and the broader “Zero Waste Cities” vision, which emphasize community-based composting as part of the country’s circular economy goals.”

Solar Pump Brings Life to Mann Field

Moe Thu Zar Soe

Solar energy, one of the cleanest and most renewable power sources, is rapidly being adopted worldwide. According to SolarPower Europe, global installed solar PV capacity could reach 655 GW in 2025, a 10% increase from the previous year. In agriculture especially, solar-powered irrigation is proving vital for farmers facing economic and environmental pressures.

In Myanmar, solar energy is being increasingly adopted across multiple sectors. The national government is actively promoting its use to support the growth of agro-based industries, with a focus on improving access to irrigation water, advancing solar-powered crop-drying processes, and accelerating the establishment of solar installation and production businesses.

In alignment with the Ministry of Energy's call to expand solar energy use in electricity-based operations, MPRL E&P has integrated solar-powered solutions into its Community Investment Program in Mann Field. The company remains committed to ensuring that its CSR initiatives in Mann Field Communities are environmentally sustainable, economically efficient, and aligned with long-term development goals. Recognizing the vital connection between water access and community well-being, MPRL E&P introduced solar-powered water pumping systems in villages around Mann Field. Today, this initiative serves as a model for renewable energy integration within its broader CSR efforts, particularly under the Community Investment Program.

"Since Fiscal Year 2023–2024, MPRL E&P has integrated solar-powered water pumping systems into its Community Investment initiative, in alignment with the Ministry of Energy's encouragement to expand solar energy use in CSR Programs. As of June 2025, a new water well has been drilled and a solar system installed in Kyar Kan, while the existing wells in Pauk Kone, Nan U, and Ywar Thar Villages were also upgraded to solar-powered water pumping systems," said U Kyaw Nyein Chan, CSR Associate from the CSR & Communications Department.



The journey began in Mann Kyo Village in Fiscal Year 2023–2024, where a solar-powered water pump now provides clean water to more than 1,600 residents. Over the next two years, the initiative expanded to Aye Mya, Kywe Cha, Kyar Kan, Pauk Kone, Nan U, and Ywar Thar Villages. Today, seven villages in Mann Field benefit from these systems, reducing reliance on fuel while improving daily life.



U Aung Ko, a Community Volunteer from Pauk Kone Village, shared: "I have been serving as a volunteer for over three years. Our village has around 130 households and nearly 500 people. This year, with the installation of the solar-powered water system in our well, life has become much easier. Previously, the entire village relied on this single well, and when electricity went out, it caused real hardship. Although there are a few private wells, most of us depended on this one, filling six to seven water tanks each day.

Now, thanks to MPRL E&P's CSR Program, we can pump water throughout the day, which has made a huge difference. The village uses water meters to distribute and charge fairly, and with lower electricity costs, we can invest more in maintaining pipelines and supporting other community development projects. MPRL E&P's CSR Program provided all the solar panels and equipment, while the village built the solar frame and actively participated in the installation. I feel truly grateful to be part of these development efforts and deeply thankful for the support that made them possible."

Altogether, seven villages in Mann Field now benefit from solar-powered water pumping systems, marking a significant reduction in fuel dependency. Beyond the technological shift, the project delivers multiple benefits: improved access to clean water, enhanced public health, reduced environmental impact, and lower household energy costs.

Daw Nwet Thi, Village Administrator of Nan U, which has 123 households and about 350 residents,



shared: "I have been serving in this role for nearly a decade. Previously, we had to pump water using a compressor every four hours, and when electricity went out, accessing water was a real challenge. At one point, the compressor even broke down, and we had to rent a small pump just to get by.

Now, with the solar-powered system, we can draw water using sunlight even when electricity is unavailable. This has greatly improved water access for our village. Aside from a few private wells, most households rely on this main well. MPRL E&P, through its CSR Program, provided full support for the solar system—covering costs, supervising the project, and ensuring proper connections. Our community contributed by preparing the site and assisting with installation. Installing this solar-powered system for our main well has brought significant benefits to Nan U, and we are deeply grateful to MPRL E&P's CSR Program."

As Myanmar strengthens its commitment to renewable energy, MPRL E&P's initiative stands as a strong example of responsible business in action. Aligned with the United Nations Sustainable Development Goals on clean water, affordable clean energy, and environmental stewardship, the company's CSR Program demonstrates how solar-powered water pumping systems can achieve more than just meeting immediate needs. They provide reliable access to water while driving lasting, positive change for the Mann Field Communities. ■



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Restoration did not end with deployment. That same afternoon, the Team conducted monitoring and evaluation activities, which included cleaning old reef structures, assessing potential threats such as sedimentation or damage, and monitoring coral growth and fish populations. Buoy lines were adjusted, signal lights replaced, and underwater photo and video documentation collected to evaluate reef health and biodiversity within the conservation area.



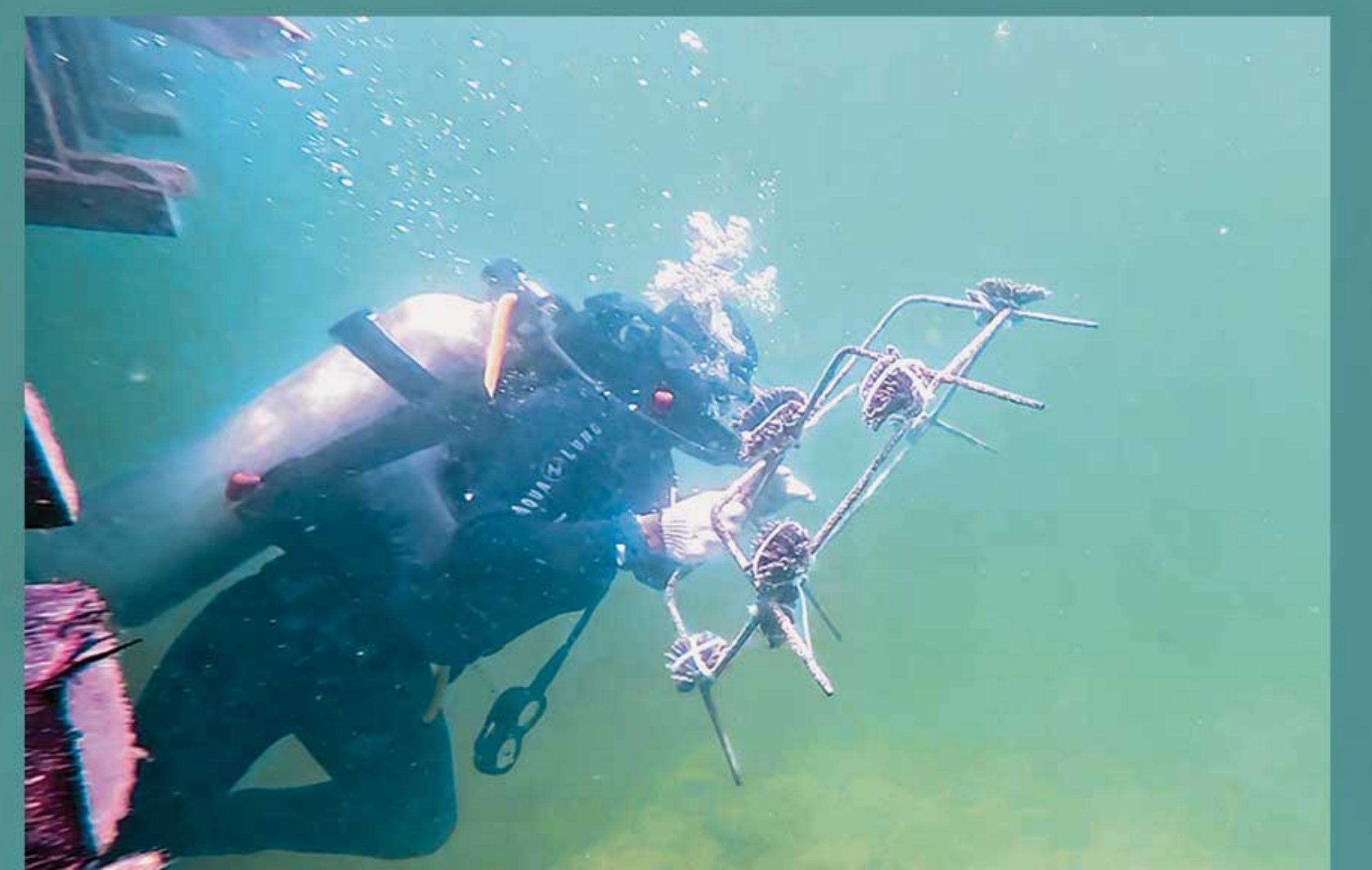
On 11 September 2025, the Team extended its conservation activities to mangrove areas in Nanttharpu, Kywe Chaing and Nga Yoke Kaung, visiting mangrove reforestation sites managed by the Worldview International Foundation. Later that evening, Diving Instructor U Sithu Aung from the Myanmar Diving Center shared diving knowledge with local divers and project members, strengthening community capacity for future conservation.

Building on findings from a coral reef assessment survey conducted in February 2025, which identified the site in front of Bay of Bengal (BOB) Hotel in Ngwe Saung, as highly suitable for conservation, the PIP CSR Team expanded its conservation activities. On 05 September 2025, 10 reef stars were deployed in front of BOB Hotel, Ngwe Saung. Chosen for its favorable water quality, coral presence, and accessibility, the location offers strong potential for coral regeneration and reef ecosystem growth.



These September efforts mark the culmination of a year-long journey under the Coral Revive Project. In collaboration with local stakeholders, the PIP CSR Team successfully deployed a range of artificial reef structures, beginning with 4 concrete blocks and 2 coral nursery structures in October 2024, followed by an additional 4 concrete blocks and sea-grass bags in November 2024, and 12 concrete pipes and 5 reef stars in March 2025. By September 2025, the cumulative deployment included 12 reef balls and 11 reef stars in Nga Yoke Kaung and 10 reef stars in Ngwe Saung.

From initial deployments of concrete blocks and nursery structures in late 2024 to the latest reef balls and stars, each intervention has been designed in collaboration with local communities, combining traditional knowledge with scientific insight. And as the tides rise and fall around Sabahtar Island and Ngwe Saung, marine life is quietly returning—proof that even in the face of environmental challenges, recovery is possible when people work together, guided by science, solidarity, and a shared commitment to the sea. ■



Reef Balls, Reef Stars, and Renewed Life Beneath the Waves

Pyae Pyae Phyoe

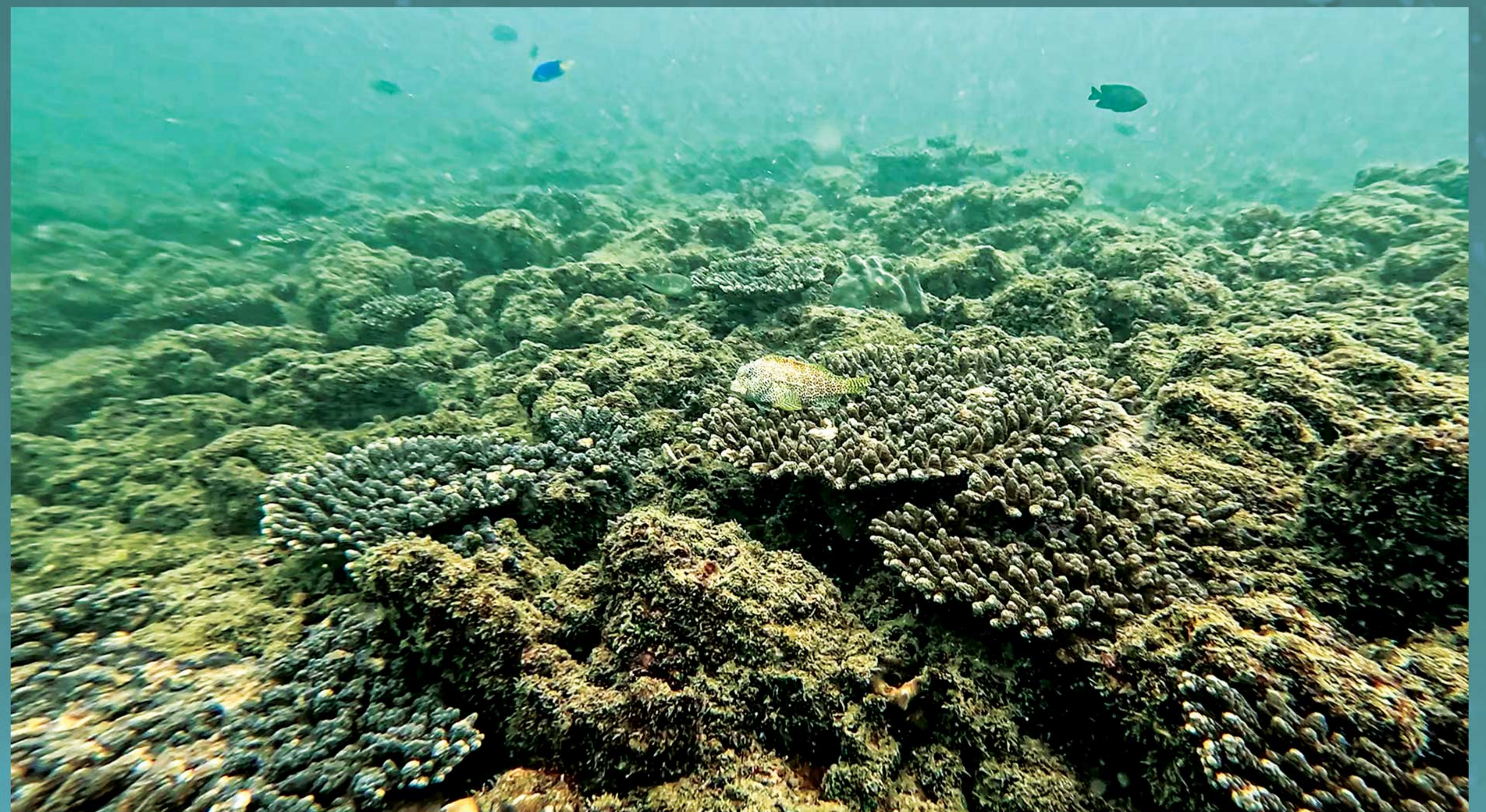


As the 2025 monsoon season drew to a close, Myanmar's coastal waters witnessed a story of renewal and resilience. Through the coral reef conservation pilot project, "Coral Revive," the PIP CSR Program of MPRL A-6 Limited deepened its commitment to marine conservation by deploying 12 reef balls and 11 reef stars in Nga Yoke Kaung, and an additional 10 reef stars in Ngwe Saung. These structures now rest beneath the waves, creating new shelters for marine life and setting the foundation for vibrant ecosystems to flourish.

kilograms, was carefully transported on a wooden raft and deployed into the waters near Sabahtar Island in Nga Yoke Kaung. Shaped like domes with openings, the reef balls were designed to mimic natural corals, providing shelter and breeding grounds for fish, while offering hard surfaces for coral larvae to settle and grow.

The following day, on 10 September 2025, the Team deployed 11 reef stars into the same conservation site. Built from iron rods coated in coral sand, these star-shaped frames were designed to support coral nurseries. Coral fragments collected from the seabed were transplanted onto the structures, which were then placed near the reef balls using lift bags. Over time, these fragments will grow and form new coral colonies, restoring sections of degraded reefs.

On 09 September 2025, local community and technical divers joined hands with the PIP CSR Team to bring life back to the sea. The 12 reef balls they deployed were not imported, but built locally, molds crafted by local carpenters and welders, concrete poured by masons, all under the guidance of the PIP CSR Team. Each reef ball, weighing more than 200



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