green hydrogen MONITOR

Reviewing Namibia's green hydrogen developments

IPPR

Issue 5 May 2026

Questions, Perspectives and Dialogues

Discussion and debate continue to evolve ... as the politics shifts

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Foreword

Evolving, complex and complicated

When the future is uncertain and unclear, it's difficult to plan precisely.

At the moment the world is rife with currents of uncertainty due to geo-political and economic disruptions constantly bursting forth.

These disruptions could cause a plan that looked solid a year, or even months, ago to suddenly seem too risky or non-viable.

And these disruptions are reverberating across the landscape of Namibia's green hydrogen and broader 'green' energy ambitions. This is the atmosphere now in which the country has to navigate decisions about future energy-related developments and investments.

In this sort of climate it would thus be understandable if decision-making went the way of the known and old, trusted fossil fuels on which to hedge the foreseeable future.

This appears to be what is happening right now – a shift in political thinking and support towards an oil-based future.

Even so, Namibia's political leaders appear to continue to see the need and urgency to embrace the 'green' energy potentials of the country.

The Vice-President's visit to Hyphen Hydrogen Energy's sites in the south-western part of the country in May was illustrative of this. As were the clear words of support for a thriving green hydrogen industry on the occasion.

That said, it is clear that a shift has taken place internationally and locally – green hydrogen promises have considerably lost their lustre. An international energy crisis has contributed to dulling some of the sheen, precisely at a time when 'green' and renewable energies should really be forging forward and upward.

This issue of Green Hydrogen Monitor captures some of the complexities of what is happening here and abroad.

In the first instance, we look at the application of 'contracts for difference' (CfD) to make green hydrogen more affordable, arguing that "the emergence of a European CfD system could therefore become one of the most important external factors shaping the future of its green hydrogen sector. If implemented at scale, it could provide the revenue certainty needed for projects like Hyphen to move towards financial close".

We also have two contributions from the Namibia Green Hydrogen Programme (NGH2P) touting, first, the nascent successes of a still emergent industry, and, second, the potential impacts of the Climate Investment Fund (CIF) Industry Decarbonisation Programme (IDP) on Namibia's 'green' industrialisation plans, arguing that for "Namibia's green hydrogen and green industrial sector, the CIF IDP is therefore best understood as both a financing opportunity and a nation-building exercise".

After this we go to the ground with Uis community activist and Tsiseb conservancy chairperson, Jimmy Areseb, arguing, among others, that local community engagements around 'green' energy developments or projects "should extend beyond defined project areas and include surrounding regions that are connected through ecosystems, water systems, and shared cultural spaces. This broader perspective can support better planning and more balanced outcomes".

This is also the message that was central to the 'Green Hydrogen South-South Dialogues from Below' seminar that took place in Windhoek in early March 2026. We provide a brief overview of the seminar towards the end of the issue.

Finally, tying in with the feature of Green Hydrogen Monitor Issue 4, around the status of 'green' energy sector related skills, we spotlight another government report that paints a rather dismal picture.

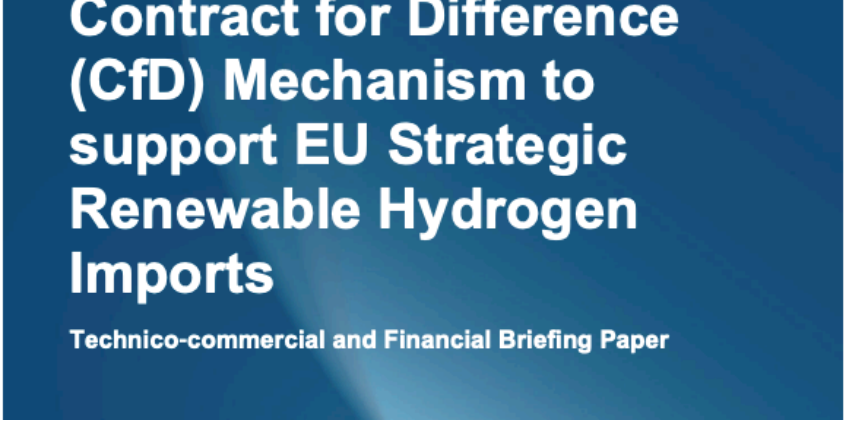
All of this content contributes to highlighting that there are still so many questions, differing perspectives and emerging or ongoing dialogues happening or to be had around Namibia's green hydrogen ambitions, plans and developments.

Once again, we hope you enjoy this edition and encourage your comments and feedback.

Frederico Links, Editor / Project Coordinator, Green Hydrogen Monitor Project

Can ‘Contracts for Difference’ Save Green Hydrogen?

In cooperation with



• EDITORIAL BOARD

The emergence of a European CfD system could become one of the most important external factors shaping the future of Namibia’s green hydrogen sector.

A growing debate is emerging in Europe over how to finance the transition from fossil fuels to green hydrogen without placing excessive costs on governments or industry. At the centre of this discussion is a mechanism known as a Contract for Difference, or CfD, which many policymakers and industry groups increasingly see as essential for getting large-scale green hydrogen projects off the ground.
A recent briefing paper produced by the Green Hydrogen Business Alliance (H2BA) argues that CfDs may provide the most practical route for scaling up imports of renewable hydrogen and ammonia into Europe.
The core problem is relatively simple. Green hydrogen remains significantly more expensive than conventional ‘grey’ hydrogen produced from natural gas. Although costs are expected to fall over time, early projects remain extremely expensive because they require vast upfront investment in renewable electricity generation, electrolysers, ports, storage and export infrastructure. Investors are reluctant to commit billions of euros to these projects if future hydrogen prices remain uncertain. European industrial buyers are also hesitant to sign long-term supply agreements while green hydrogen still costs more than fossil-fuel alternatives.

A recent briefing paper produced by the Green Hydrogen Business Alliance (H2BA) argues that CfDs may provide the most practical route for scaling up imports of renewable hydrogen and ammonia into Europe.

PRICE STABILITY MATTERS

This is where the CfD mechanism comes in. Under a CfD, a producer continues selling hydrogen or ammonia into the market as normal, but receives a financial top-up if market prices fall below an agreed ‘strike price’. If market prices later rise above that strike price, the producer pays money back into the system. The idea is to create long-term price stability while avoiding excessive profits if the market improves unexpectedly. The H2BA paper strongly favours this ‘two-sided’ approach because it reduces risks for both governments and investors.

>

Supporters argue that the main value of a CfD is not simply subsidy. Rather, it is the certainty it provides to lenders. Large hydrogen and ammonia projects depend heavily on long-term debt financing. Banks are far more willing to lend at lower interest rates if future revenues are predictable.

According to the H2BA paper, lower financing costs are one of the biggest drivers of reducing the final cost of green hydrogen.

The mechanism is loosely modelled on approaches already used successfully in renewable electricity markets, particularly offshore wind. Over the past decade, CfDs helped drive massive investment into European wind projects while gradually lowering prices as technologies matured and industries scaled up. Proponents believe the same model can now be applied to hydrogen and ammonia imports.

The H2BA paper also argues that Europe cannot realistically meet its future hydrogen needs through domestic production alone. Many European projects are smaller, more fragmented and constrained by land, energy and permitting limitations. This has increased interest in importing hydrogen or ammonia from countries with abundant renewable energy resources and large available land areas. Namibia is frequently mentioned in this context because of its exceptional solar and wind conditions and its ambition to become a major exporter of green hydrogen and ammonia.

This is where the debate becomes highly relevant for Namibia. Large projects such as Hyphen depend heavily on long-term export demand from Europe. However, European buyers remain cautious because green ammonia still costs more than conventional alternatives. A CfD system could effectively bridge this gap by guaranteeing part of the revenue stream for producers exporting into Europe. In practice, this could significantly improve the bankability of projects like Hyphen and make it easier for developers to secure financing from international lenders.

NEVER-ENDING SUBSIDIES

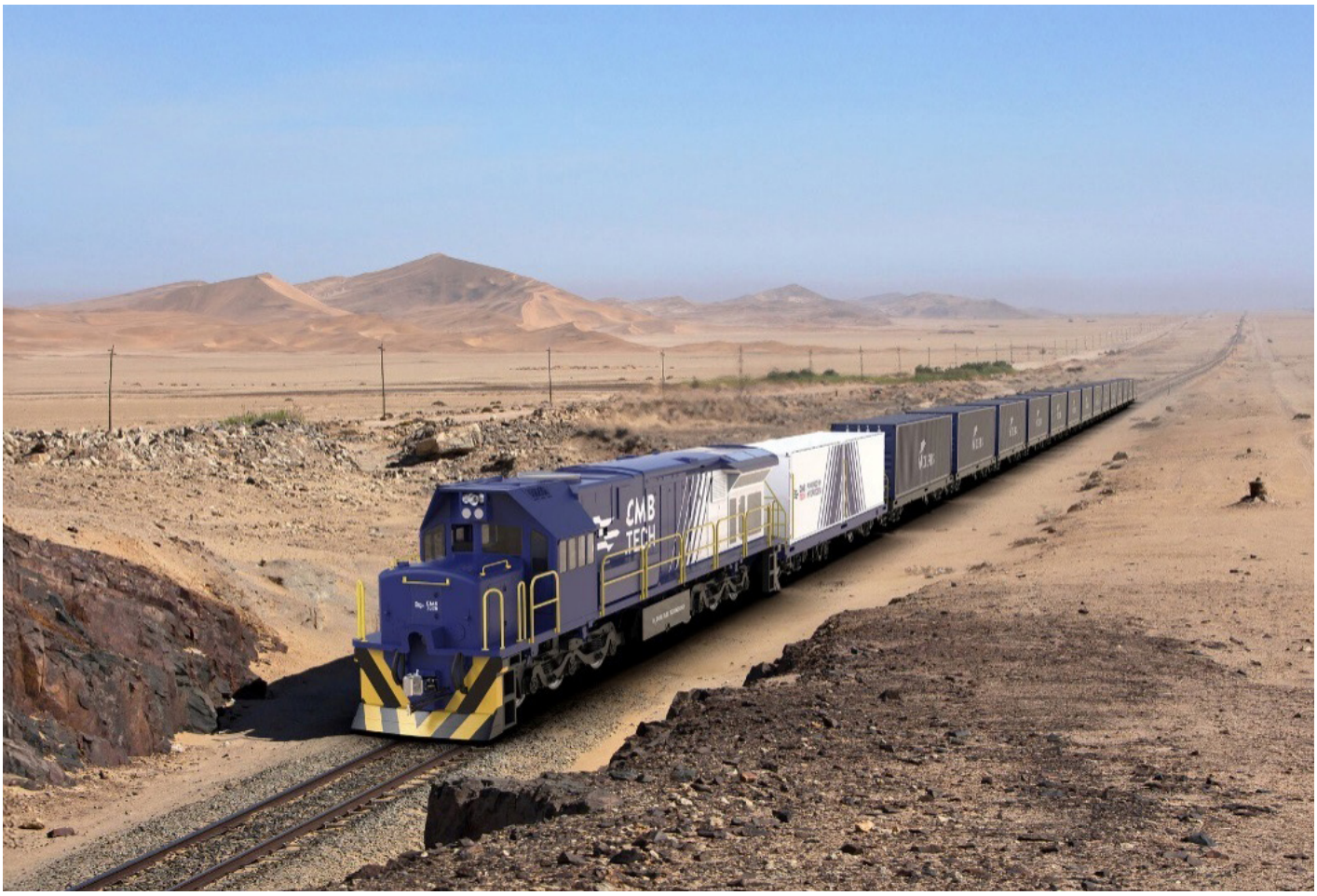
However, the proposal is not without controversy. Critics worry that governments could end up subsidising the sector for far longer than originally intended. There are concerns that hydrogen producers may become dependent on state support in the same way that some renewable energy sectors relied on subsidies for many years. Others question whether European taxpayers should effectively underwrite massive overseas industrial projects while domestic industries continue to face economic pressures.

There are also broader uncertainties surrounding future hydrogen demand. While Europe has ambitious decarbonisation goals, many industrial users have not yet fully committed to switching away from fossil fuels. The H2BA paper itself acknowledges that CfDs alone cannot create demand. Long-term policy measures, regulations and industrial mandates will still be needed to force or encourage companies to buy green hydrogen instead of cheaper fossil-based alternatives.

For Namibia, the emergence of a European CfD system could therefore become one of the most important external factors shaping the future of its green hydrogen sector. If implemented at scale, it could provide the revenue certainty needed for projects like Hyphen to move towards financial close. Without such mechanisms, many large export-oriented projects may struggle to secure the financing required to proceed.■

The H2BA paper itself acknowledges that CfDs alone cannot create demand. Long-term policy measures, regulations and industrial mandates will still be needed to force or encourage companies to buy green hydrogen instead of cheaper fossil-based alternatives.

*The H2BA briefing paper, 'Contract for Difference (CfD) Mechanism to Support EU Strategic Renewable Hydrogen Imports', is available as a download at: https://green-hydrogen-business-alliance.de/download/contract-for-difference-cfd-mechanism/



TransNamib's board approved a six-month trial of a hydrogen-diesel dual-fuel locomotive to be run in partnership with CMB.TECH and Africa Global Logistics on the Walvis Bay–Windhoek corridor. (Source: NGH2P)

Recent Signals of Movement in Namibia's Green Hydrogen Sector

• **JONA MUSHEKO**

Developments show that Namibia's green hydrogen sector is gradually moving from broad ambition toward more practical implementation.

Apart from the Climate Investment Fund's (CIF) Industry Decarbonisation Programme, which Namibia is currently advancing to attract more concessional finance for green industrialisation, the past six months have also produced several tangible developments across the country's wider green hydrogen and renewable energy ecosystem.

Taken together, these developments suggest that the sector is continuing to move on several fronts at once: project preparation, pilot and demonstration activity, financing, infrastructure planning, transport applications, regulatory positioning and international market engagement.

The CIF IDP nevertheless remains the biggest national platform now in motion. Namibia's June 2025 selection into the programme opened the door to prepare a Sectoral Transformation Investment Plan (s-TIP) capable of mobilising up to US$250 million in concessional climate finance, with the prospect of additional co-financing from multilateral development banks.

Since then, a national call for project proposals drew 148 submissions; a first industrial decarbonisation workshop was convened in March 2026 under the leadership of the National Planning Commission; and the process has now entered regional consultations, beginning in Walvis Bay, to ground the pipeline in stakeholder inputs, infrastructure realities and implementation needs.

The current clustering work is built around about 78 shortlisted developers/projects, grouped into themes such as clean energy and industrial power anchors, enabling infrastructure, industrial system decarbonisation and value addition, circular economy and low-carbon manufacturing, and bioeconomy and climate innovation. Outside the CIF track itself, project-level developments have also continued.

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In April 2026, HyIron reported that, for the first time, it had successfully used its hydrogen-based rotary kiln in Namibia to process 80 tonnes of untreated Australian iron ore with an iron content of about 56% into direct-reduced iron.

PROJECTS MOVING FORWARD

In December 2025, the African Development Bank (AfDB) announced approval of a US$10 million concessional loan from the Sustainable Energy Fund for Africa to support Hyphen's project preparation. According to the bank, the funding is specifically intended to help advance the project's bankability and front-end development work, including technical preparation and early-stage risk sharing. This is significant because it signals continued confidence from a major African financier in Namibia's flagship large-scale green hydrogen development, even before a final investment decision is taken.

Another notable area of progress is HyIron-Oshivela, which continues to provide one of the most concrete examples of green industrial activity on the ground. In April 2026, HyIron reported that, for the first time, it had successfully used its hydrogen-based rotary kiln in Namibia to process 80 tonnes of untreated Australian iron ore with an iron content of about 56% into direct-reduced iron. This industrial-scale pilot test forms part of the SuSteelAG consortium's effort to prove that lower-grade ores can also be processed using hydrogen, potentially widening the range of feedstocks for low-carbon steelmaking. For Namibia, the importance lies not only in the technical milestone itself, but in what it represents: a move from theoretical discussions about beneficiation toward actual experimentation with iron ore transformation and green industrial value chains linked to Namibia.

At Cleanergy Solutions Namibia, the picture is one of both operational proof-of-concept and preparation for a larger next stage. The Walvis Bay demonstration and refuelling facility, inaugurated in 2025, remains one of Namibia's most visible pilot projects in hydrogen mobility and industrial applications. At the same time, reporting in 2025 indicated that Cleanergy had submitted an updated environmental and social impact assessment for revisions to its planned ammonia and hydrogen pipeline configuration, tied to its larger-scale project near Arandis and Walvis Bay. While that expansion has not yet moved to construction, the continued permitting and design activity shows that the project is still evolving beyond its pilot stage.

The Daures Green Hydrogen Village also remains in forward motion. In 2025, the project announced that it had been selected as one of UNIDO's first demonstration projects under the Accelerate-to-Demonstrate (A2D) Facility, with funding and support aimed at enabling the production of ammonium sulphate fertiliser. Subsequent project reporting stated that the pilot phase had been completed and that the first local fertiliser production is expected in late 2026, while a related UNIDO-backed training programme aims to reach more than 250 young Namibians, particularly from marginalised communities.

Transport applications are also beginning to enter the picture more visibly. In April 2026, it was reported that TransNamib's board approved a six-month trial of a hydrogen-diesel dual-fuel locomotive to be run in partnership with CMB.TECH and Africa Global Logistics on the Walvis Bay–Windhoek corridor. Reporting described the initiative as a prototype effort to modernise rolling stock and test whether hydrogen can be integrated into freight rail without a full fleet replacement. This is still only a pilot stage, but it is noteworthy because it moves hydrogen from production and export discussions into domestic logistics and transport decarbonisation—one of the categories that has also shown up in the CIF project pipeline.Aviation is another new area of activity. The Namibia Civil Aviation Authority (NCAA) launched the official Sustainable Aviation Fuel (SAF) Feasibility Study in Windhoek on 31 March–1 April 2026, describing it as a six-month study to assess Namibia's ability to produce and deploy SAF, including feedstocks, conversion technologies, financing needs and implementation options. While SAF is not identical to green hydrogen, it sits within the broader low-carbon fuels and industrial decarbonisation space and points to Namibia's interest in expanding the clean fuels conversation into hard-to-abate sectors such as aviation. That matters for a country trying to position green industrialisation as an economy-wide transition rather than a single-sector experiment. >

In April 2026, a Namibian technical delegation led by the Namibia Green Hydrogen Programme (NGH2P) visited Beijing and Shanghai to engage companies such as Envision, Goldwind, GoodWe, Hyper Strong, Haitai Solar, Hygreen Energy and Mingyang on wind, solar, storage, fuel cells and integrated industrial parks.

The plant at Hylron's Oshivela green iron facility in the Erongo Region. (Source: NGH2P)

REGULATORY PROGRESS

On the regulatory and power-system side, the Electricity Control Board (ECB) has also been signalling a more active role in preparing the electricity sector for a changing energy landscape. At the launch of its Integrated Strategic Business Plan 2026–2031, ECB leadership stressed the need to reduce dependence on imports and increase local generation as a way to improve affordability and security of supply. It has been reported that the Board's evolving strategic role has also linked the regulator to Namibia's broader energy transition and to a more modern, data-led regulatory approach. This matters for green hydrogen because Namibia's large projects, and many of the CIF pipeline concepts, depend on how effectively the country can regulate, price and integrate new power generation into the national system.

International market-building and diplomatic engagement have also remained active. In August 2025, Japan's official summary of a summit meeting with Namibia confirmed Japanese interest in Namibia's green hydrogen and energy resources, with both sides discussing support for investment and job creation. More recently, in April 2026, a Namibian technical delegation led by the Namibia Green Hydrogen Programme (NGH2P) visited Beijing and Shanghai to engage companies such as Envision, Goldwind, GoodWe, Hyper Strong, Haitai Solar, Hygreen Energy and Mingyang on wind, solar, storage, fuel cells and integrated industrial parks. Taken together, these developments show that Namibia's green hydrogen sector is gradually moving from broad ambition toward more practical implementation. The CIF IDP remains the most significant structured financing process now under way, with the potential to influence infrastructure, manufacturing, transport, minerals and wider industrial development. At the same time, progress outside that process is also becoming clearer: project preparation is advancing, pilot applications are expanding, new funding is being secured, training initiatives are taking shape, and regulatory and infrastructure planning are beginning to respond to the needs of a growing sector. The task ahead is to ensure that these separate developments are aligned in a way that delivers lasting industrial value, jobs and broader economic impact for Namibia.■

** Jona Musheko is the manager responsible for External Affairs and Communications at the Namibia Green Hydrogen Programme (NGH2P).*

(Source: NGH2P)

Namibia's CIF Industry Decarbonisation Programme Process and its Role in Green Industrialisation

• **JONA MUSHEKO**

The Climate Investment Fund's (CIF) Industry Decarbonisation Programme (IDP) is a global concessional finance initiative designed to help developing countries reduce industrial greenhouse gas emissions while supporting cleaner and more competitive industrial development.

In June 2025, Namibia announced that it had been invited to participate in the programme after being selected through a competitive international process. This gave the country an opportunity to prepare a Sectoral Transformation Investment Plan (s-TIP) through which it could seek to mobilise up to US$250 million in concessional finance, with the potential to attract further support from multilateral development banks and other investment partners.

Since that announcement, Namibia has moved through several important stages, including the launch of a national call for project proposals, the first industrial decarbonisation workshop, the shortlisting of projects to help shape the investment pipeline, and the start of regional stakeholder consultations.

This article provides an update on that process, which began last year, and explains its intended impact on Namibia's broader green industrialisation agenda, including industrial infrastructure, value addition, low-carbon manufacturing, and long-term economic transformation in line with the Sixth National Development Plan (NDP6).

> **The s-TIP cannot be a purely technical document developed in Windhoek and submitted in isolation. It must reflect implementation realities on the ground.**

ADVANCING THE WIDER AGENDA

From the outset, the CIF IDP was framed in Namibia not as a stand-alone climate project, but as an instrument to advance the country's wider development ambitions under Vision 2030 and the Sixth National Development Plan (NDP6).

NDP6 is explicit that Namibia must move beyond primary resource dependence and build a more diversified economy based on value addition, manufacturing, infrastructure expansion and green growth. It sets ambitious targets, including increasing the contribution of secondary industry, expanding manufacturing, and creating 30,000 green jobs by 2030. In this context, the CIF IDP offered something highly strategic: concessional capital to help turn policy ambition into investable industrial projects.

The June 2025 announcement stated that Namibia intended to use CIF support to catalyse green industrialisation by developing critical minerals, green hydrogen and renewable energy value chains; strengthen energy security; support regional decarbonisation; promote inclusive development through jobs and local value addition; and build institutional capacity for a just transition. In other words, the CIF IDP was positioned not simply as climate finance, but as a platform through which Namibia could begin shaping future industrial competitiveness.

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The next step was to translate this opportunity into a credible pipeline. In September 2025, the government launched a Call for Project Proposals aligned to the CIF IDP process. By the closing date in February 2026, the process had attracted 148 submissions, a response that suggested a broad national appetite for green industrial development well beyond hydrogen production alone. The strong response also demonstrated that Namibia's green industrialisation discussion had matured. It was no longer confined to a few flagship projects; it had begun to widen into a broader ecosystem of developers, manufacturers, infrastructure players, innovators and service providers.

Jona Musheko

That pipeline then moved into a more structured stage in March 2026, when the Namibia Industrial Decarbonisation Workshop was convened under the leadership of the National Planning Commission. The workshop brought together government, development finance institutions, project applicants and private sector stakeholders to engage directly on the CIF financing framework, the investment planning process, and the path toward project readiness. It was at this stage that the broader purpose of the CIF IDP became clearer. As the Director-General of the National Planning Commission stated, the facility was "more than a source of financing", it was "a catalytic instrument" through which Namibia could unlock industrial infrastructure, stimulate investment, and reduce pressure on the national fiscus while supporting Namibian-owned projects.

The March workshop provided clarity on what kinds of projects and enabling actions would be needed if Namibia was to submit a strong Sectoral Transformation Investment Plan (s-TIP). It also reinforced the connection between the CIF IDP and NDP6. The Director-General emphasised that the emerging project pipeline aligned closely with national priorities, especially in mineral beneficiation, low-carbon manufacturing, industrial system decarbonisation, value addition in critical minerals, and modern industrial infrastructure.

This is where the stakeholder engagement process becomes crucial. The s-TIP cannot be a purely technical document developed in Windhoek and submitted in isolation. It must reflect implementation realities on the ground. That is why the regional stakeholder engagement process, launched in Walvis Bay on 21–22 April 2026, marks such an important phase in the journey. The purpose of these regional consultations is to ensure that all key implementing stakeholders are adequately informed and meaningfully consulted on infrastructure, policy, permits, land, water, energy, logistics, finance and local readiness.

The process is intended to identify bottlenecks, gather regional priorities, strengthen coordination, and document concerns and recommendations for integration into the s-TIP.

The choice of Walvis Bay and the Erongo Region for the first leg was deliberate. As both the programme agenda and the speeches delivered there made clear, Erongo sits at the centre of several issues that will shape Namibia's industrial future: port logistics, industrial land, desalination, power supply, export corridors, and downstream industrial development.

The Erongo Region already hosts approximately six active green industrialisation projects, including Hylron-Oshivela, CMB.Tech/Cleanergy, Hydrogène de France, Daures Green Hydrogen Village and Zhero, making it a logical place to begin regional consultations. More importantly, the task now was to move beyond dialogue and begin shaping concrete, actionable proposals that could form part of a pragmatic pipeline of bankable projects under the s-TIP.

Discussions focused on regional readiness, infrastructure needs and stakeholder priorities, including sessions touching on various SOEs' mandates and their roles. These discussions were specifically intended to assess enabling infrastructure readiness, identify bottlenecks in grid, water, port, rail, land and regulation, and align SOE planning with the needs of the project clusters. Other sessions focused on common-user infrastructure such as pipelines, storage, transmission corridors, desalination, bulk water supply, rail and road corridors, and shared utilities for industrial zones. Community, labour and local participation were also given dedicated space, including workforce development, community expectations and social licence considerations.

CLEARER PATH

Looking ahead, the path is now becoming clearer. The Walvis Bay engagement is only the first leg in a wider regional consultation process that is set to continue in //Kharas and then in Khomas, where national validation and policy alignment are expected to take place. These outputs will feed into Namibia's final s-TIP submission later in 2026.

The bigger picture is what makes the CIF IDP especially significant. When realised, it can help Namibia do more than finance a few isolated projects. It can help the country build the underlying systems of green industrialisation: transmission, water, logistics, industrial parks, local manufacturing support, skills development and cleaner value chains. It will also seek to support mineral beneficiation, the low-carbon industry and export competitiveness while reducing emissions. It can also help crowd in wider finance and deepen investor confidence in Namibia's long-term industrial proposition.

For Namibia's green hydrogen and green industrial sector, the CIF IDP is therefore best understood as both a financing opportunity and a nation-building exercise. It has already moved through several important phases: international selection in 2025, a national call for proposals, a first industrial decarbonisation workshop, the emergence of a clustered project pipeline, and now regional stakeholder consultations aimed at sharpening the final investment plan.

The next phase will be decisive. It will test whether Namibia can bring together policy, projects, infrastructure and stakeholder alignment into one coherent submission that not only secures concessional finance, but also lays the foundation for a more industrial, resilient and inclusive economy.■

** Jona Musheko is the manager responsible for External Affairs and Communications at the Namibia Green Hydrogen Programme (NGH2P).*

Jimmy Areseb (speaking, far right) on a panel at the 'Green Hydrogen South-South Dialogues from Below' seminar in Windhoek in March 2026. (Source: Eric Cezne / Martin Gruber)

Green Hydrogen in Namibia: Promise, Pressure, and the Politics of Place

• JIMMY ARESEB

The choices made at this stage will have lasting effects. They will influence not only the success of the green hydrogen sector, but also the well-being of the communities and environments that are part of it.

While this opportunity is widely acknowledged, the reality at community level is more complex. In areas such as Daures Constituency in the Erongo Region, proposed developments are often located in spaces that are not actively settled or used for farming. These areas are commonly described as open land. However, this description does not fully reflect their importance. Many of these landscapes form part of sensitive ecological systems and serve as important breeding zones for wildlife. As a result, the effects of development may not always be immediately visible at household level, but they can still influence conservation efforts, natural resource stability, and long term environmental balance.

LAND AND CONSERVATION

Understanding land beyond its visible use is central to this discussion. Areas that appear unused often play a critical role in maintaining ecological systems. In Daures, several of the sites identified for potential development fall within wildlife movement corridors and breeding areas that support biodiversity.
For conservancies, wildlife is closely tied to livelihoods. Income from tourism and conservation initiatives depends on stable ecosystems and predictable animal behaviour. When large scale projects are introduced, even those focused on clean energy, they can alter these patterns. Construction activities, increased traffic, and ongoing operations may disturb wildlife and shift movement routes over time.
This does not suggest that development should be avoided entirely. Rather, it highlights the need for careful planning that recognises the value of these systems. Ultimately, it is about coexistence, ensuring that development takes place in a way that protects what already exists while improving the living conditions of immediate communities.

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The choices made at this stage will have lasting effects. They will influence not only the success of the green hydrogen sector, but also the well-being of the communities and environments that are part of it.

WATER IN A DRY ENVIRONMENT

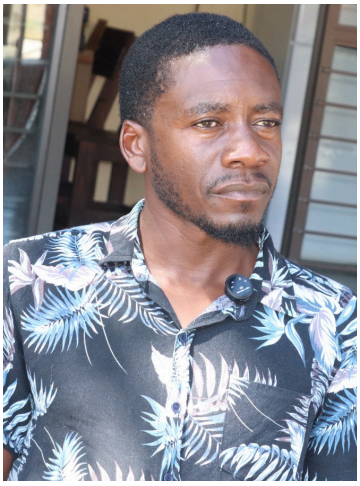
Water availability remains one of the most significant considerations. Green hydrogen production requires substantial volumes of water, particularly in the process of electrolysis. While coastal desalination is often presented as a primary solution, questions remain about how water demand will be managed across the full value chain, especially where infrastructure extends inland.
Namibia is already a water scarce country, and both human populations and ecosystems rely on limited resources. Groundwater, in particular, plays a critical role in sustaining life in arid regions. Research has shown that excessive abstraction can affect both upstream and downstream users, depending on extraction levels and geographic reach.
An additional concern is the cumulative impact of multiple developments. While a single project may appear manageable, the combined demand from several operations could place increased pressure on shared water systems. This highlights the importance of coordinated planning, continuous monitoring, and clear limits to ensure long term sustainability.>

CONSULTATION AND INCLUSION

The way in which communities are engaged remains a key issue. Although consultation processes are conducted, there are ongoing concerns about their depth and effectiveness. In many instances, communities feel that they are being informed about developments rather than actively shaping them.

Meaningful participation requires more than attendance at meetings. It depends on access to clear information, sufficient time to consider proposals, and the ability to influence outcomes. Without these elements, engagement risks becoming a procedural step rather than a genuine dialogue.

There is also a need to consider timing. Early engagement allows communities to raise concerns before decisions are finalised, creating space for adjustments. This approach not only strengthens trust but can also improve project outcomes by identifying potential challenges at an early stage.



Jimmy Areseb (Source: Mathews Abraham / NMT)

CULTURAL HERITAGE AND IDENTITY

Even in areas that are not permanently settled, the land often holds cultural and historical significance. In areas such as Daures, there are ancestral sites and locations that form part of the community's identity and history.

Previous experiences with mining and infrastructure development have shown that these sites can be vulnerable if not properly documented and protected. Damage to such areas goes beyond physical loss. It can affect social cohesion, cultural continuity, and the relationship between communities and their environment.

There are also real concerns, particularly from the south of the country, that large scale developments risk overlooking or even erasing sites linked to well known historical atrocities. These are not simply locations on a map, but places that carry memory and meaning. Development on such lands should not be considered. Protecting these areas is essential to preserve historical truth, respect affected communities, and avoid deepening existing wounds.

Recognising cultural heritage as part of development planning is therefore not optional. It is a necessary step in ensuring that progress does not come at the cost of identity and history.

ECONOMIC OPPORTUNITY AND FAIR BENEFITS

The potential economic benefits of green hydrogen are significant. Investment in this sector can stimulate national growth, create employment opportunities, and contribute to infrastructure development. For Namibia, this represents an important opportunity to diversify the economy.

At the same time, the distribution of these benefits requires closer attention. Employment during construction phases is often temporary, and long term opportunities may be limited if not carefully structured. Communities located near project areas often question how they will benefit beyond short term engagement.

Clear and transparent benefit sharing arrangements are essential. These may include community agreements, local procurement commitments, and targeted development initiatives. Without such mechanisms, there is a risk that the advantages of development will not reach those who are most directly affected.

Ensuring fairness in this area is not only a matter of equity. It also contributes to long term project stability by building trust and shared interest.

GOVERNANCE AND RESPONSIBILITY

Effective governance is central to balancing these different interests. Government institutions have the responsibility to ensure that environmental assessments are thorough, that consultation processes are meaningful, and that agreements are upheld.

Coordination across different levels of governance is equally important. National policies need to align with regional priorities and local realities. Conservancies, traditional authorities, and local leadership structures all play a role, yet their involvement is not always clearly defined.

Strengthening these connections can improve decision making and reduce conflict. It can also ensure that development is guided by a broader understanding of both opportunity and risk.

When governance systems function effectively, they provide a framework that allows development to proceed in a way that is both responsible and sustainable.

A MOMENT OF CHOICE

Namibia stands at an important point in its development journey. The growth of the green hydrogen sector offers a pathway into a rapidly evolving global energy landscape. At the same time, it introduces new responsibilities that require careful consideration.

Communities in Daures and across the country are not opposed to progress. Their concerns are focused on how development is implemented and whether it reflects local realities. They are seeking approaches that are inclusive, transparent, and respectful of both environmental systems and cultural heritage.

For this to be achieved, there needs to be stronger consolidation with adjacent communities. Engagement should extend beyond defined project areas and include surrounding regions that are connected through ecosystems, water systems, and shared cultural spaces. This broader perspective can support better planning and more balanced outcomes.

The choices made at this stage will have lasting effects. They will influence not only the success of the green hydrogen sector, but also the well-being of the communities and environments that are part of it. Ensuring that development is carefully managed will determine whether this opportunity leads to long term benefit or unintended pressure on already fragile systems.■

** Jimmy Areseb is a community activist based at Uis in the Erongo Region and chairperson of the Tsiseb Conservancy.*

Dialogues from Below

The ‘Green Hydrogen South - South Dialogues from Below’ seminar was held at the NUST Hotel School on 2-3 March 2026. (Source: Frederico Links)

Corrina van Wyk (Legal Assistance Centre), Fatima Vally (Mining Affected Communities in Action, South Africa) and Joao do Cumbe (Cumbe quilombola, Brazil) on the panel ‘Human rights, legal action, and justice in green hydrogen’. (Source: Frederico Links)

Traditional and indigenous community flags from South America on display at the front of the seminar room. (Source: Eric Cezne / Martin Gruber)

Activists, advocates, academics and researchers gathered in Windhoek in March to map pathways of solidarity around green hydrogen projects across two continents

• FREDERICO LINKS

Questioning or criticising green hydrogen developments or initiatives has become life threatening in some parts of the world.

This was one of the striking take-aways of a two-day seminar, titled ‘Green Hydrogen South-South Dialogues from Below’, that was held at the Namibia University of Science and Technology (NUST) on 2-3 March 2026. The seminar, which brought together representatives from indigenous communities, civil society activists, academics and researchers from Namibia, South Africa, Brazil, Chile and Colombia, was organised by the African Studies Centre at Leiden University (ASCL), Netherlands.

According to the seminar convenor, Eric Cezne, in an ASCL blogpost, the purpose of the dialogues was to create “space to examine how diverse lived experiences (actual or anticipated) with green hydrogen across the Global South relate to, diverge from, or illuminate one another” and to explore “possibilities for bottom-up South–South interactions, contestations, and solidarities around hydrogen and other so-called ‘green’ energies”.

>

(From left) Paulina Hidalgo (Fundacion Tanti, Chile), Louivenzia Komases (Nama Traditional Leaders Association Youth Forum, Namibia), Jazmin Romero Epiayu (Feminist Movement of Wayuu Women and Girls, Colombia) and Paulo Anace (Anace Indigenous People, Brazil) on the panel 'Indigenous and traditional populations in green hydrogen'. (Source: Eric Cezne / Martin Gruber)

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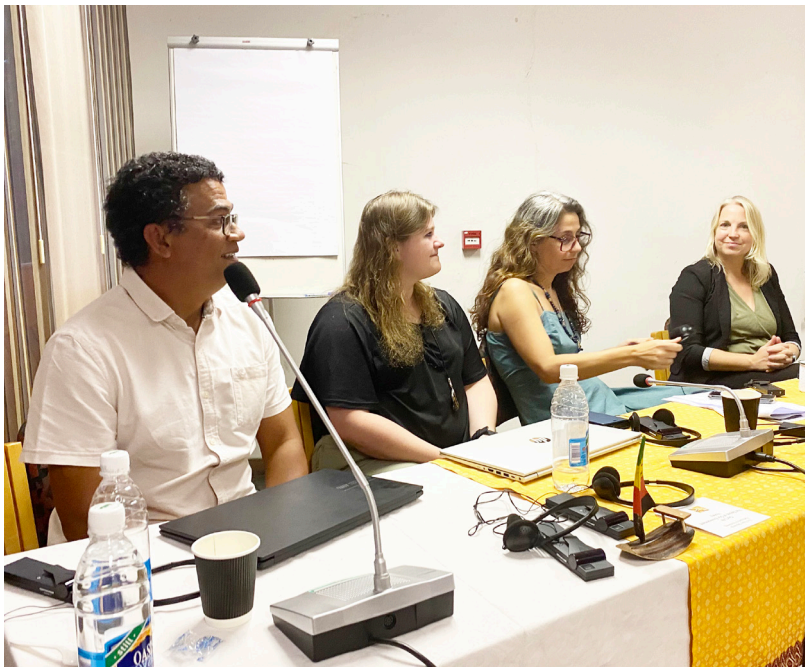
>
> – Eric Cezne



(From left) Frederico Links (Institute for Public Policy Research), Dr Stephanie Borchardt (Stellenbosch University, South Africa), Dr Adryane Gorayeb (Federal University of Ceara, Brazil) and Siri Lijfering (INCLUDE Platform, South Africa) on the panel 'Knowledge for whom? Researching green hydrogen at the intersection of policy, industry and society'. (Source: Frederico Links)

The discussions over the two-days showed that some experiences are shared, despite communities and activists being oceans, languages and cultures apart.

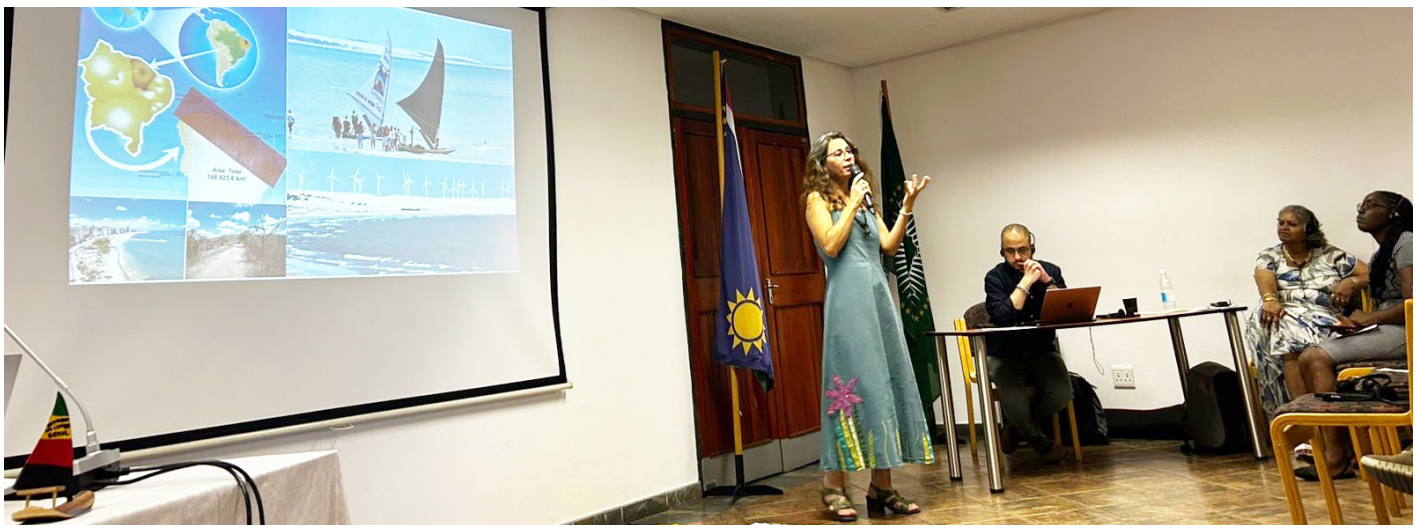
It was recounted that in parts of South America, intimidation, harassment and even violence have marked the imposition of green hydrogen projects on indigenous communities.

It also became clear that a lack of meaningful consultation and non-transparency characterise green hydrogen and other 'green' energy developments across all five countries, as well as others.

Which is why one of the representatives of an indigenous community noted: "I don't think these projects will improve people's lives."

And why one of the key observations of the two-day gathering was that community leaders, civil society activists and advocates, academics and researchers needed to work together across countries and continents to increase scrutiny of governments and companies over the impacts of green hydrogen and other 'green' energy developments on local communities.

"Only by fighting do our lives change," one of the seminar participants exhorted, and another passionately added: "We resist to exist."■



Dr Adryane Gorayeb, of the Federal University of Ceara, Brazil, during a presentation on 2 March 2026. (Source: Eric Cezne / Martin Gruber)

Green Hydrogen in the News

Vice-President Lucia Witbooi and minister Inge Zaamwani-Kamwi visited the Hyphen project site in the Tsau //Khaeb National Park in the //Kharas Region in May 2026. (Source: Namibian Presidency)

Hyphen procurement to reach N$54 billion locally

In April 2026 it was reported that Hyphen Hydrogen Energy would spend in the region of N$54 billion on local procurement over the lifespan of its project.

The figure was announced by Hyphen senior manager Johannes Shipepe at an event in Windhoek. This figure would only amount to about 30% of all Hyphen's procurement, according to Shipepe.

In order for Namibian suppliers and service providers to participate in Hyphen-related procurement opportunities, the company has initiated an enterprise and business capacity development programme for Namibian businesses.

"The objective is to ensure Namibian companies are not limited to basic services, but are able to compete for more specialised opportunities across the value chain," Shipepe reportedly said.

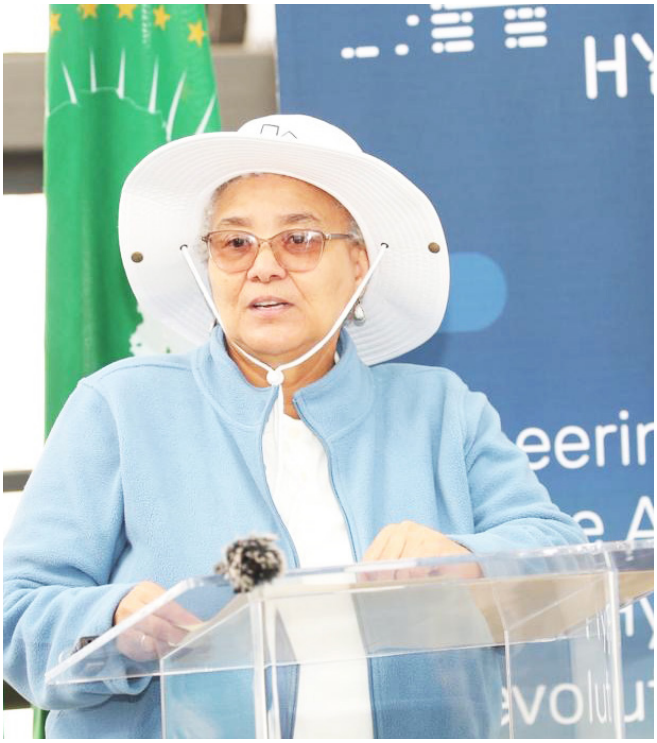
The initiative was launched in partnership with the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), with grant funding of up to 300 000 euros from the International Hydrogen Ramp-up Programme.

(The Namibian)

Vice-President visits Hyphen sites

On 3 May 2026, Namibian Vice-President Lucia Witbooi visited the Hyphen project sites in the //Kharas Region, in the Tsau //Khaeb National Park and Angra Point, Luderitz, in what appeared to be a show of support for the project.

In remarks delivered during the site visits, Vice-President Witbooi stated: "The Government of the Republic of Namibia fully supports the development of the green hydrogen sector, and



Vice-President Lucia Witbooi
(Source: Namibian Presidency)

the Hyphen project as the flagship project and strategic catalyst within the sector. This project is being developed within the framework of Namibian law, under a transparent and structured agreement with the Government, and in full alignment with Namibia's national development priorities.">

(Seated) Vice-President Lucia Witbooi and minister Inge Zaamwani-Kamwi with Hyphen CEO Marco Raffinetti, and Hyphen staff (standing), at Luderitz, in May 2026. (Source: Namibian Presidency)

She added: "The development we are pursuing here is designed to be responsible, sustainable, and inclusive ensuring that economic progress does not come at the expense of protecting our natural environment or cultural heritage. The success of this project will ultimately be measured not only in megawatts or export volumes, but in the lives it changes."
She concluded: "I urge for strong collaboration between all stakeholders involved in this project. Let us work in unity of purpose for the shared benefits of this development in this region and the country at large."

(Namibian Presidency)

Green Industries Council formed

Days after the Vice-President's visit to Hyphen's sites in the south-western corner of the country, it was reported that the Green Hydrogen Council would be replaced by a new entity called the Green Industries Council.
The decision to create the Green Industries Council was taken at Cabinet Level during discussions in late April and early May 2026, said information minister Emma Theofelus.
"The new Green Industries Council will oversee and guide Namibia's broader green industrialisation agenda, with focus on policy coordination, institutional alignment and investment priorities aimed at accelerating industrialisation, economic diversification and job creation," the minister said.
The Green Hydrogen Council's term lapsed in February this year, after about five years of existence.
The new council will be chaired by the Director-General of the National Planning Commission and will consist of senior representatives from a host of ministries.

(New Era)

Green hydrogen agenda highlights Namibia-EU Business Forum 2026 …

Green hydrogen featured prominently at the two-day Namibia-EU Business Forum 2026, which was held in Windhoek from 11-13 May 2026.
The theme of this year's forum was 'Towards stronger, greener and more diversified economies'.
From the first plenary on the first day of the forum, green hydrogen was situated as a central point of deliberations. This was followed by the first thematic session on day one, which was titled 'Green Hydrogen and Renewable Energies'.
According to reports, over N$100 million was pledged towards Namibia's green industrial transformation and development at the Namibia-EU Business Forum 2026.
The forum was jointly hosted by the EU in Namibia and Namibia's National Planning Commission.

(EU & The Namibian)

… And Hyphen workshops Namibian business participation

On the side-lines of the Namibia-EU Business Forum 2026, Hyphen Hydrogen Energy hosted an enterprise and supplier development workshop, in order to identify "challenges limiting local enterprise participation in large-scale infrastructure and industrial projects, particularly within the green hydrogen sector", it was reported.
According to reporting, "the initiative forms part of ongoing efforts to support Namibia's broader industrialisation agenda while enhancing local procurement, enterprise development and long-term economic transformation".

(Informante)

NIPDB Skills Report Highlights

Another government report concludes that Namibia is falling short in producing the skills for a 'green' energy economy.

In the last issue of the Green Hydrogen Monitor the focus was on skills and how the Namibian education sector has been failing in adequately preparing or producing graduates in fields critical to the green hydrogen industry.
Shortly after the issue came out in late October 2025, the Namibia Investment Promotion and Development Board (NIPDB) released its 'Namibia State of Skills Demand and Supply' report.
The report basically underscores the fact that, at education and skills level, the country is ill-prepared for any sort of future technology-intensive energy economy, whether fossil fuel-driven or 'green' powered.
Following are some of the highlights from the NIPDB's skills report.

Namibia's tertiary education system is still supplying traditional occupations, not aligned to economic and emerging sectors, resulting in skills mismatches and oversupply.

Critical skills are required in manufacturing, agriculture, automotive, IT and the energy sector.

Namibia requires specialisation and certifications in almost all occupational fields.

Tertiary education attainment has increased from 5.8 percent in 2011 to 11.8 percent in 2023 nationally, indicating progress but still below labour market needs.

TVET and General High Education Ratio

- For every 28 learners there is approximately 1 TVET trainee.
- For every 28 learners in basic education, there are approximately 11.69 students in Higher Education Institutions

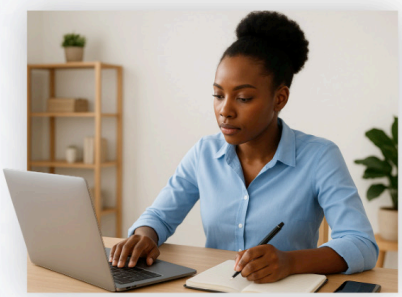
Education System: While Namibia has made strides in expanding access to education, issues persist concerning the quality and responsiveness of the education and training system, from basic education through to Technical Vocational Education and Training (TVET) and higher education. Secondary education completion rose modestly from 20.5 percent in 2011 to 24.8 percent in 2023, while tertiary education attainment increased from 5.8 percent to 11.8 percent in the same period, still falling short of labour market needs. High underperformance rates in national exams (nearly 80 percent in 2023 for NSSCO and NSSCAS) severely limit the pipeline of qualified individuals for further education and skilled employment.

TVET System: The TVET sector, crucial for skills development, shows a significant gap between enrollment and graduation rates; for instance, in 2020, only about 14 percent of enrolled students graduated[6]. While TVET predominantly supplies skills in Manufacturing, Construction, Administration, and Tourism, there's a need to align curricula with emerging global labour market trends, particularly in digital technology.

Higher Education: HEIs have seen increased enrollment but face challenges with low and fluctuating graduation numbers, indicating system inefficiencies and high dropout rates. There's a noted oversupply of graduates in fields like business management, health and social services, education and training, and public , while high-growth sectors such as agriculture, wholesale/retail trade, and manufacturing are undersupplied with skills such as agriculture and nature conservation, manufacturing, engineering, physical planning[7].

Future Skills: Globally, technological change, the green transition, geoeconomic fragmentation, economic uncertainty, and demographic shifts are reshaping labour markets. Skills related to AI and big data, networks and cybersecurity, and technological literacy are anticipated to be the fastest-growing[8]. However, Namibia currently faces challenges in adopting 4IR technologies due to inadequate skills, lack of capital, and insufficient infrastructure[9]. The report identifies future skills needed in sectors like renewable energy, chemicals and basic materials, machinery and electronics, digital and global business services, communication and technology, and the culture and creative industry.

- Over 73 occupations have been identified as in demand to date, reflecting a dynamic and evolving labour market.
- The highest concentration of occupations are in
  - Agriculture, Forestry and Fishing
  - Wholesale and Retail trade
  - Repair of motorcycles and motor vehicles
  - Manufacturing
  - Administrative and support service activities
  - Activities of households as employers
  - Education
  - Public Administration and Defence
  - Communication
  - Construction and other services activities
  - Human Health and social work activities
  - Transportation and storage
  - Financial and insurance activities.



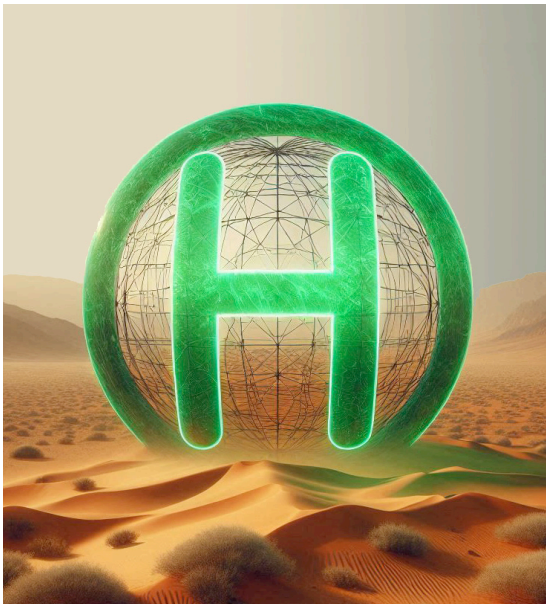
The report concludes that concerted, collaborative efforts among the government, educational institutions, industry stakeholders, and the public are imperative to bridge the skills gap. By investing strategically in its human capital, Namibia can unlock its full economic potential, foster inclusive growth, and build a more prosperous and equitable future for all its citizens.

green hydrogen MONITOR

Reviewing Namibia's green hydrogen developments

IPPR

Issue 1 June 2024



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Youth and Green Hydrogen - Plans, Promises & Prospects

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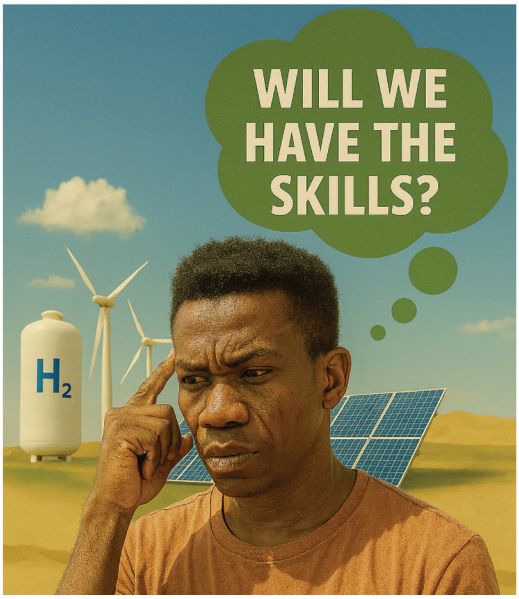

Previous issues of the Green Hydrogen Monitor can be accessed and downloaded from the IPPR website @ www.ippr.org.na

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Present in more than 60 countries world-wide, the Hanns Seidel Foundation (HSF) is a German non-profit organisation promoting democracy, good governance and the rule of law across the African continent. Cooperating with its Namibian partners, such as IPPR, HSF also seeks to contribute to sustainable development by strengthening peace, human security, and environmental protection. The contents of this publication do not necessarily reflect the views and opinions of the HSF.

About the IPPR

The Institute for Public Policy Research (IPPR) is a not-for-profit organisation with a mission to deliver independent, analytical, critical yet constructive research into social, political and economic issues that affect development in Namibia. The IPPR was established in the belief that free and critical debate informed by quality research promotes development.

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