



DIGBY WELLS
ENVIRONMENTAL

MAKING A DIFFERENCE

Digby Wells
Impact Report

For nearly 30 years, Digby Wells Environmental has been Making a Difference — delivering sustainable solutions that balance progress with the protection of our planet. This impact report celebrates our journey, showcasing the meaningful partnerships and innovative projects that drive responsible growth worldwide.





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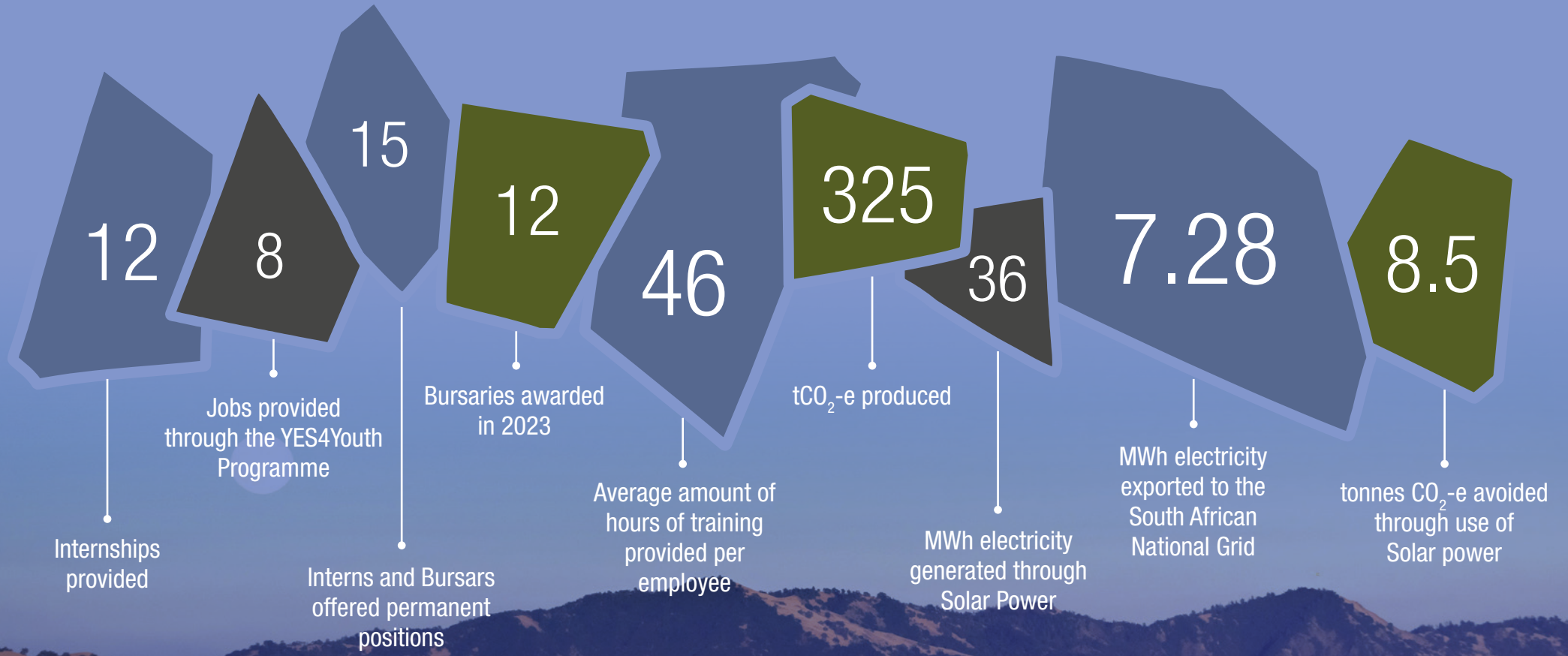
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OUR IMPACT





FOREWORD

Balancing Wealth and Health For Planet and People

They say, “Our health is our wealth.” The same applies to our planet. We cannot continue to accumulate wealth at the expense of the Earth’s health — it simply doesn’t add up. The benefits of material wealth will mean little in a world that grows sicker by the day. True prosperity lies in harmony, not exploitation.

Population Peaks and Planetary Pressure

This year brought some positive news. A United Nations report revealed that the global population is expected to peak earlier and at a slightly lower level than previously thought — at around 10.3 billion by 2084. While this offers some breathing room, the message and challenge remains: if resource use per person continues at today’s levels, particularly in economically developed nations, then we are in for a rough ride, as our planet cannot support this peak population.

It is human nature that we all seek to improve our lives. However, we must learn to do this in a manner that does not compromise the health of our planet or negatively impact others. We need to face up to some harsh realities, wealthier nations consume a disproportionate amount of the earth’s resources, and the wealthiest 10% of the population consumes a staggering portion of the world’s resources. Those in lower-income brackets and emerging countries not only have to make do with far less, more often than not they are hit first and worst by environmental damage and impacts, including climate change. Unfortunately, the gap is widening, and the solution lies not just in slowing population growth but in radically rethinking how we use the Earth’s finite resources, and we must strive to do so in a way that provides upliftment for everyone.

Digby Wells: Digging for Solutions, Not Just Resources

At Digby Wells Environmental, we are committed to turning sustainability into a meaningful reality, not just a buzzword. We are pioneering innovative solutions and operationalising Environmental, Social, and Governance (ESG) to empower our partners and clients to make more informed and responsible decisions, and designing projects that serve as blueprints for a sustainable future. Our influence extends far beyond our company walls, we’ve nurtured the growth of other businesses and seen our clients replicate the sustainable solutions we’ve crafted for them. It’s positive proof that we’re on the right track and leading the way in environmental stewardship.

People Power: Growing with Purpose

Sustainability starts with people. Over the past year, we’ve welcomed 33 new members to the Digby Wells family, many of whom are starting their careers with us. We’ve also provided numerous bursaries and scholarships, supporting both current and future employees in their educational journeys. Our projects are designed to positively impact communities around the globe. The past year alone, we have worked on five large-scale resettlement projects involving approximately 4000 households, alongside Environmental and Social Impact Assessments (ESIAs) in some of the world’s most diverse environments — from the deserts of Balochistan to the lush tropics of the Dominican Republic. And our footprint is expanding. While our heart remains in Africa, we are now extending our reach to projects in the Americas, Central Asia, and Europe.

Additionally, we’re expanding our team by establishing partnerships in regions where local expertise is essential, leveraging their knowledge of legislative requirements and the legal landscape. Our global growth strategy has also led us into new regions, including the United States, Australia and Zambia, broadening our impact worldwide.

What has been clear over the past year is that despite inherent diversification that comes with the expansion of Digby Wells, the common driver that binds is that we want to make a difference.

A Future Built on Cooperation and Innovation

There’s still a long road ahead to ensure the sustainability of our beautiful planet, but we remain optimistic. Achieving global sustainability will require hard work, cooperation, and innovation — none of which we can afford to shy away from. The stakes are too high, and the alternative is not an option.

At Digby Wells, we are proud to play our part, and we look forward to continuing this essential work. After all, we have only one Earth, and we’re determined to protect it for future generations.



Graham Trusler:
Chief Executive Officer



WHO WE ARE

Pioneering a Sustainable Path

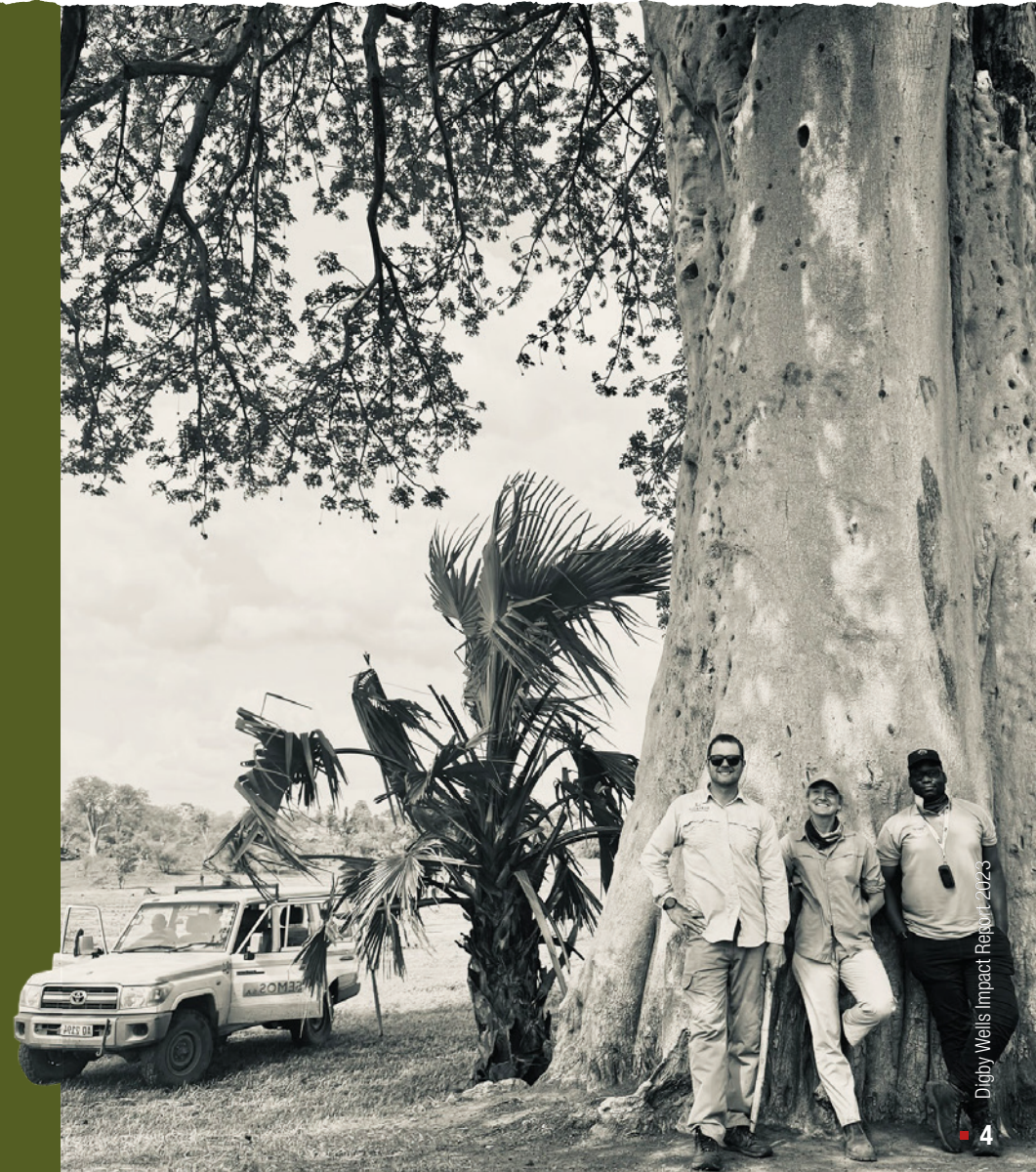
Since 1995, Digby Wells Environmental has been digging deep — not just into the earth, but into our mission of creating a more sustainable future. As an employee-owned consultancy, we specialize in integrated environmental, social, and sustainability services for the natural resources sector. With a multidisciplinary team of over 150 specialists, we operate from six offices across sub-Saharan Africa and the United Kingdom, and our reach is expanding. We're building a presence in key regions like the United States and Australia, reflecting our global vision.

Mission-Driven, Values-Led

We are more than a consultancy — we're a mission-driven, values-focused organization. These principles shape who we are, guide the work we do, and define the clients we serve. Over the past 29 years, we've successfully delivered more than 5,000 projects in 77 countries, partnering with leading mining companies, government authorities, and development finance institutions. Every project reflects our unwavering commitment to sustainability and our vision of a better, more balanced world.

Our Mission: Moving from the world we live in to the world we seek

This mission is the foundation of everything we do at Digby Wells. We are constantly working to bridge the gap between today's challenges and tomorrow's solutions, moving us closer to a world where environmental stewardship and economic growth go hand-in-hand.



Our Global Footprint





OUR VALUES

The Foundation of Who We Are

Our values aren't just words, they are the bedrock of how we work, collaborate, and grow. They shape our daily actions and guide our commitment to sustainability, excellence, and each other. Together, they define not just what we do, but who we are.

We assess each opportunity for work against our values and should the opportunity not align with our values we do not take it on.

Teamwork:

Stronger Together

At Digby Wells, we know that true success comes from working together. We communicate openly, constructively, and consistently. Every voice is valued, every idea respected, because diversity of thought is our strength. We share our skills, knowledge, and experiences freely — because when we grow together, we all win. From small victories to major milestones, we celebrate our collective achievements. And when things get tough, we're always ready to lend a hand or ask for one.

Integrity and Honesty:

Doing Right, Always

At Digby Wells doing the right thing is a way of life, grounded in our commitment to the highest standards of integrity. We respect our colleagues, clients, and communities, delivering work that not only meets expectations but makes a meaningful difference. We speak the truth — even when it's hard — because trust must be the cornerstone of everything we do. Fairness and authenticity are central to how we act, and we lead by example, taking responsibility for our actions and never backing down from a challenge.

Care:

Compassion in Every Step

We care for our company, our people, our clients, and our environment with a sense of responsibility that never wavers. Empathy and compassion guide our interactions, and we're mindful of the health and safety of those around us. We handle challenges with care and determination and resolve conflicts quickly and with respect. Supporting each other is a priority — whether through honest feedback or offering tools for personal well-being, we are committed to helping each other achieve our goals.

Continuous Improvement:

Pushing Boundaries

We believe that good ideas become great when they're put into action. At Digby Wells, we are constantly looking for ways to improve, adapt, and innovate. We embrace challenges and step out of our comfort zones to find solutions that are both practical and bold. We see boundaries not as a limit or barrier but as a chance to think creatively and deliver solutions that stand the test of time. In a world that's constantly changing, we are agile and always ready to meet the next challenge with fresh thinking and best practices.



Invested and Passionate:

Leading with Heart

Passion drives us, and that passion is contagious. We're invested in the work we do, the people we work with, and the impact we make. From our team to our community, we're dedicated to fostering growth and creating positive change.

Accountability and commitment are at the heart of everything we do — we take ownership of our actions and always aim for the best possible outcome. We love what we do, and that enthusiasm fuels our drive to stay at the forefront of our industry. Whether it's putting in the extra time or going the extra mile, we're always ready to push for success. And through it all, we make sure to have fun, because when you love what you do, it shows.





Grounded in Good Governance

As a private, employee-owned company, we are deeply committed to strong governance to ensure the sustainability of our business for the benefit of our employees, clients, and the communities we serve. This year, the Board welcomed two new non-executive directors: Stuart Brown, a Chartered Accountant with over 30 years of experience in finance and mining, who joined as Chairman of the Finance and Risk Committee, and Mr. Frans Baleni, former General Secretary of the South African National Union of Mineworkers, bringing over 40 years of industry expertise to his role as Chairman of the Remuneration Committee. Roger Williams, a non-executive director since 2017, assumed the role of Chairman of the Board.

The Board also upholds a fraud and ethics hotline, managed by an independent service provider, with any reported breaches of ethics or instances of fraud promptly escalated to the Chairman.






SAFETY

Prioritizing Health and Safety:

A Core Commitment

At Digby Wells, keeping our people safe and healthy is a fundamental part of how we work every day. We've built a robust framework of policies and procedures, anchored by our Group Health and Safety Policy, to take our commitment from words on paper to everyday action.

Our policy includes key commitments to:

-  Continuously improve our Health and Safety System.
-  Identify and assess hazards and risks, implementing strong mitigation measures to prevent them.
-  Safeguard the health and safety of the communities where we work, ensuring that our actions do no harm.

Raising the Bar on Safety

As our business has grown in scale, maturity, and global reach, so too does our commitment to safety. In 2022, we took a step forward by engaging an independent Risk Advisor to audit, review, and align our health and safety systems with the stringent requirements of ISO45001. This represented more than a procedural update, it reaffirmed that safety is central to everything we do, and we worked throughout 2023 to further this commitment and entrench behaviour into all our thinking and action.






Our commitment doesn't stop at our own doors. We extended our health and safety standards to those we do business with, updating our supplier onboarding practices to ensure that all sub-contractors read, understand, and commit to the same high standards we uphold.



Living Safety on the Ground

Having the right policies and procedures in place is only the first step. Real safety happens in the field, and we measure our success by how effectively these standards are implemented on the ground. A central pillar of our approach to health and safety is a commitment to continuous training and awareness-raising, because safety isn't a one-time event, it's an ongoing mindset.

Our staff receive regular, comprehensive training, including:

-  Annual Health and Safety Induction
-  Safety Mindset and Culture training
-  Legal liability training for managers
-  Fire safety and first aid
-  Specialized training such as 4x4 defensive driving and sexual harassment prevention

We also conduct annual medicals for all staff and pre- and post-employment medicals for contractors, reinforcing our commitment to the health and well-being of everyone we work with.

We offer anonymous support to staff with mental health issues and other emotional issues which staff can contact at any time.

Proactive Safety Measures and Performance Tracking

To ensure we're on the right track, we use a range of leading and lagging indicators to measure our safety performance. By focusing on leading indicators, we aim to identify potential risks before they turn into incidents, allowing us to take preventative action where needed. In 2023, we recorded four first-aid injuries and two lost-time injury, reminders of why our vigilance must never waver.



At Digby Wells, safety isn't just a responsibility — it's a value we live, measure, and continuously improve.

Barbara Wessels,
Executive: Technical Services,
& Chair of the Health and
Safety Committee





THE FUTURE

Investing in the Future: Nurturing the Next Generation of Sustainability Leaders

Our commitment to sustainability extends beyond the projects we work on today — it's about empowering the specialists and leaders of tomorrow. Alongside investing in our own people, we are dedicated to training and developing the next generation of social and environmental experts in two keyways.

Bursary Program: Supporting Ambition, Cultivating Talent

Our company bursary program is designed to support talented, ambitious university students who are passionate about making a difference in the environmental and social sciences. Each year, we invite students to apply for a bursary that covers their tuition and book costs. But we don't stop there. We take their learning further by offering opportunities to shadow our team and gain hands-on experience during university holidays.

Since 2016, we've awarded 32 bursaries across South Africa and Mali, and we're proud to say that this year, three of our bursars who completed their studies, have joined us as team members. During 2024 we've further expanded our bursary programme to also include Tanzania.

The Digby Wells Education Trust: Empowering Access to Education

In line with our mission to drive positive change, the Digby Wells Education Trust holds 10% of the shares in Digby Wells & Associates (South Africa) Pty Ltd. This trust is dedicated to funding education for Black South Africans in the Environmental and Social Sciences, ensuring that the leaders of tomorrow reflect the diversity of the communities we serve.



Digby Wells lifted me up, they paid all my university fees and gave me a taste of industry through vocational work. They say it takes a village to raise a child, and Digby Wells is part of my village, I will never stop saying thank you.

Kedibone Mathaba,
MSc Candidate &
Digby Wells Bursar



Internships:

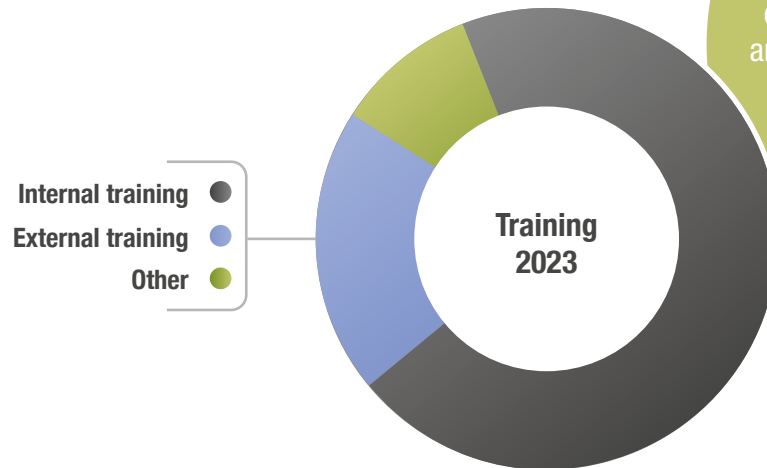
Building Careers and Identifying Talent

The second way we invest in future talent is through our range of paid internship programmes. These initiatives provide young graduates with the crucial work experience needed to secure full-time employment, while giving us the chance to identify emerging talent. In fact, some of our senior consultants and executives began their careers with us as interns — proof that the next generation of leaders often grows from within.

To extend our impact, we frequently partner with other organizations, allowing us to expand our reach and create even more opportunities. Since 2021 we have successfully partnered with the Mining Qualifications Authority (MQA) to support 17 funded internships.

We have also partnered with the Youth Employment Service (YES) programme to provide employment opportunities for a further 16 young people in South Africa. We are now working to develop and implement similar opportunities across our other offices.

The Youth Employment Service (YES) is dedicated to addressing the youth unemployment crisis in South Africa by creating 12-month quality work experiences for unemployed youth. It's the largest private sector-funded pipeline for unemployed talent in South Africa with a current run rate of creating 3,000-4,000 high-quality jobs per month.



Building Capability:

Investing in Continuous Growth

We believe that learning never stops. In addition to our internships and bursary programmes, we are committed to continuously building the skills and capabilities of our people. Our approach to training is holistic, covering everything from on-the-job shadowing and mentoring to internal colloquiums and external training programmes.

Each employee is equipped with a dedicated training budget and an individual development plan, carefully crafted and reviewed annually in collaboration with their line manager. This ensures that personal growth aligns with both the individual's aspirations and the needs of the business.

In 2023 alone, our team collectively undertook more than 7300 hours of training — a testament to our commitment to fostering talent and staying ahead in a rapidly evolving industry.

At Digby Wells, we actively train the next generation, empowering them to lead, innovate, and shape the future of environmental and social responsibility.

Kirsten Strauss,
Executive: Human Resources and
Organisational Effectiveness



Working on Sunshine:

Harnessing Solar Power for a Greener Future

In August 2020, we took a significant step toward sustainability by installing 96 solar panels at our Bryanston office, becoming the first company in our office park to embrace renewable energy solutions. Since then, these solar panels have been hard at work, generating more than 50% of the electricity consumed by the Bryanston office.

Over the course of a full year, our self-generated electricity produces more than 50 MWh of power, our offices consume about 80% of this power, helping us to save more than 20 tonnes of CO₂-e each year. To put that in perspective, that's equivalent to the amount of CO₂-e sequestered by 16 hectares of forest.

We're also proud to have contributed to South Africa's broader energy landscape, exporting more than 7MWh of electricity back to the South African national grid each year, that's enough to provide power for 8 average homes for a month.

Tracking Our Carbon

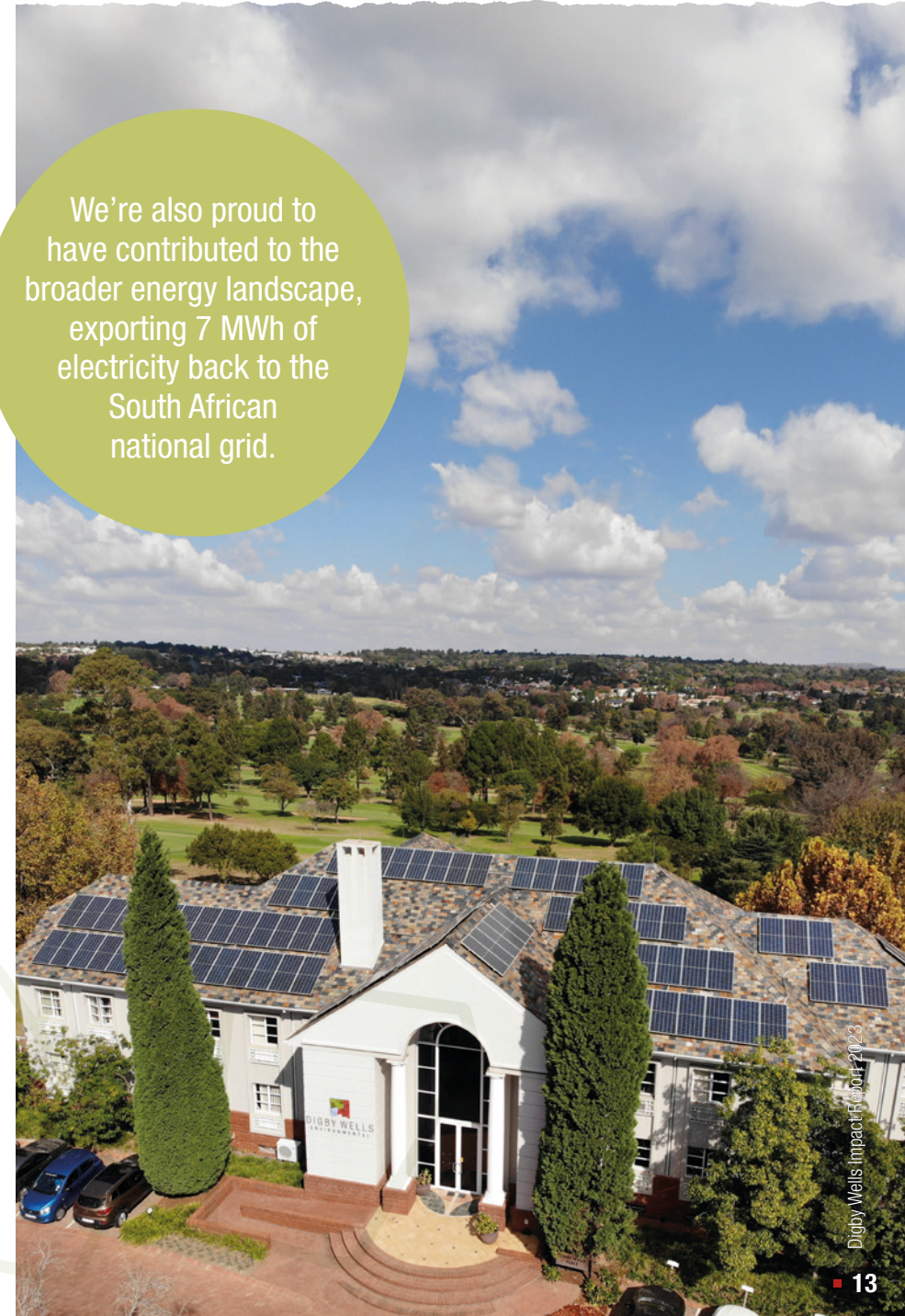
Footprint:

2023 in Review

In 2023, we marked the third consecutive year of calculating our greenhouse gas emissions footprint, covering direct Scope 1 emissions, indirect Scope 2 emissions, and limited Scope 3 emissions. Our total emissions for the year reached [325] tCO₂-e.

The bulk of our emissions are scope 2 emissions and associated with our purchased electricity. Other large sources are the emissions from the fuel used in our fleet.

We're also proud to have contributed to the broader energy landscape, exporting 7 MWh of electricity back to the South African national grid.



A large yellow and red mining truck is shown in a quarry or mining site. The truck is positioned in the center-right of the frame, facing left. The background consists of a steep, rocky hillside under a blue sky with scattered white clouds. The foreground is filled with large, grey rocks. The overall scene is dimly lit, suggesting dusk or dawn.

**THE DIFFERENCE WE MAKE
FOR OUR
CLIENTS**

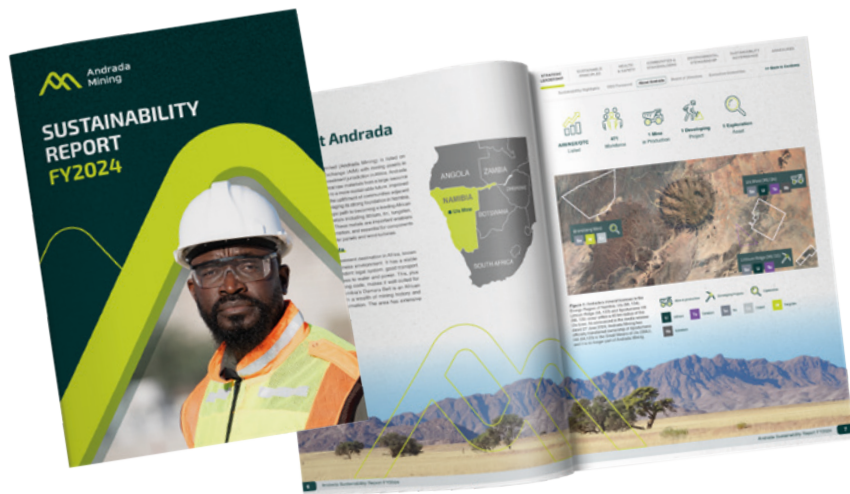


FROM JUNIOR TO LEADER

Andrada Mining's ESG Journey to Sustainable Leadership

Ambitious Junior, Andrada Mining has set out to establish itself as a sustainability leader in the pan-African mining industry. Understanding the importance of aligning with industry best practices, the company committed to producing annual sustainability reports — raising the bar for transparency and accountability.

In the face of shifting market dynamics and increasing regulatory pressures, Andrada saw the growing importance of robust sustainability reporting. It wasn't just about meeting the expectations of NGOs and consumers; regulators and investors now demand comprehensive evaluations of sustainability performance and risk management. Andrada knew that to lead, it had to rise to the challenge.



Crafting a Strong ESG Framework: A Collaborative Approach

To navigate these complexities, Andrada partnered with Digby Wells to create a tailored Environmental, Social, and Governance (ESG) Framework. This framework would be essential in guiding Andrada's sustainability journey, providing a clear, structured way to measure and improve performance across three crucial areas:



Environment: Climate change, Water, and Biodiversity management and conservation.



Social: Health and Safety, and Community development and engagement.



Governance: Leadership structure, board composition, and adherence to ethical standards.

With ESG standards becoming increasingly critical for investors, regulators, and stakeholders alike, Andrada's commitment to these pillars reflects its long-term vision for sustainable growth. The collaboration with Digby Wells initially focused on producing Andrada's first-ever sustainability report, aligning with the Global Reporting Initiative (GRI) and Sustainability Accounting Standards Board (SASB) frameworks — both recognized for their rigor and transparency in sustainability reporting.

Driving Change Through Strategic Insight

As part of Sustainability report compilation process Digby Wells conducted a comprehensive review of Andrada's policies and operations, assessing everything from health and safety protocols to community engagement strategies. This initial base work created a blueprint for the future, directing Andrada's efforts in environmental stewardship, social responsibility, and governance integrity.

A Mirror to a Mission

Through close collaboration with Andrada's Corporate Sustainability team, Digby Wells provided strategic insights and identified key areas for improvement. This partnership delivered tangible outcomes, including, enhanced health and safety metrics and performance, and the development of forward-thinking policies that align with leading ESG standards.

A Sustainable Future in Mining

As Andrada continues its journey to become a leading mining company in pan-Africa, the integration of a robust ESG Framework has laid a solid foundation for sustainable success. By embedding sustainability into the heart of its operations, Andrada is not only strengthening its position within the industry but also making meaningful contributions to society and the environment. Together with Digby Wells, Andrada is poised to set new standards for what it means to be a responsible and forward-looking mining company.



We are proud to partner with Andrada Mining to develop their ESG framework. Our partnership reflects a shared commitment to responsible mining practices from the outset and to, setting new standards for transparency and accountability. Together, we are setting the standard not just for Juniors but wider industry.

Sarah Cooper,
Executive Sustainability
Services and Business Development



BREAKING BIAS

Gender Diversity Solutions at Digby Wells

In an era where diversity and inclusion are critical to organizational success, Digby Wells is dedicated to breaking down barriers and creating a more equitable workplace environment. With a specialized focus on the mining industry in Africa, we are committed to identifying, understanding, and addressing the challenges that stand in the way of greater gender diversity in mining operations. Through careful research and comprehensive data collection, our Gender Diversity Solutions service offering is designed to provide actionable insights and innovative strategies. Our goal is to empower clients to cultivate inclusive cultures that unlock the full potential of every individual.

We believe in creating real, lasting change. That's why we provide practical recommendations and prioritized action plans, tailored specifically to the needs and unique circumstances of each operation.

Our Approach to Gender Diversity Solutions

Our approach to Gender Diversity Solutions is structured around four key elements:



Data Collection



Data Analysis, Identification, and Assessment of Barriers



Identification of Actions



Action Priority List

Before conducting site visits, we develop a comprehensive plan in consultation with stakeholders to guide our discussions. This plan covers key themes such as traditional gender roles, economic opportunities, workplace culture, and career development. During the site visits, we facilitate Focus Group Discussions (FGDs) with a diverse range of internal and external stakeholders to explore these topics in depth.

After the site visits, we move into data analysis to identify the critical barriers to gender diversity that were highlighted during the FGDs. These barriers are categorized based on frequency and lived experience, resulting in a barrier significance rating. From there, our team identifies specific actions to address these barriers, based on stakeholder feedback and the operational team's input. Actions are categorized based on the level of effort required — low, medium, or high — defined by both the time and budget necessary for implementation.

Working with Barrick

Our work with Barrick Gold Corporation stands as a testament to the impact of our Gender Diversity Solutions. In partnership with Barrick, we conducted pioneering research to identify and assess the barriers to gender diversity within their African operations. By analysing national gender contexts, legislative frameworks, internal site dynamics, and community influences, we gained valuable insights into the opportunities for increasing female participation in the mining workforce.

Our efforts not only helped Barrick promote gender diversity and equity within their operations but also contributed to broader societal goals. These include fostering economic growth, boosting productivity, and advancing gender equality.



At Digby Wells, we're not just breaking bias — we're building a more inclusive and prosperous future for the mining industry.

Emma Woodward,
Senior Social Consultant,
Project Manager



ENDEAVOUR'S BIODIVERSITY WINS

Biodiversity Wins:

Screening Biodiversity Value with Critical Habitat Assessments

In a continued collaboration to promote nature stewardship, Digby Wells has been working with Endeavour Mining Corporation to elevate their biodiversity management practices. Many of Endeavour's operations are located in ecologically sensitive regions of West Africa, and the company understands the need for and is committed to responsible biodiversity management. Since 2021, Digby Wells has been guiding Endeavour in identifying strategic biodiversity themes and crafting a group-wide biodiversity policy and strategy. Endeavour's commitment is clear: achieve no net loss of biodiversity in critical habitats, defined by the International Finance Corporation (IFC) as areas with significant biodiversity features.

To support this goal, Digby Wells piloted Critical Habitat Assessments (CHA) at two key sites — Ity and the Sabodala-Massawa Complex — both situated in highly biodiverse regions.

Protecting Biodiversity:

From Pangolins to Ecosystems

As part of a CHA, our specialists gather biodiversity data through both desktop-based screenings and on-site surveys. This information includes species identification, their threat levels, geographical range, and habitats. We also take into account the broader ecological landscape, such as protected areas and Key Biodiversity Areas (KBA).

By analyzing this data, we define the Area of Influence (AoI) and Ecologically Appropriate Areas of Analysis (EAAA), which help us map the extent of a project's direct and indirect impacts on the environment. Using the EAAA, biodiversity features are assessed against five critical habitat triggers:

-  Threatened species
-  Endemic and range-restricted species
-  Migratory and congregatory species
-  Threatened and unique ecosystems
-  Key evolutionary processes

If any of these criteria are met, the area is deemed a critical habitat, and targeted management strategies are developed to ensure its protection.

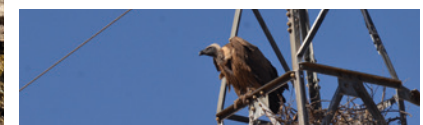
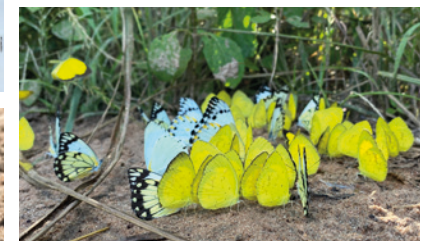


Ity's Unique Biodiversity

At the Ity site in Côte d'Ivoire, located in the Guinean Forests of the West Africa Biodiversity Hotspot, Digby Wells conducted a CHA to safeguard species in an area where less than 30% of natural vegetation remains. The site is home to a variety of terrestrial and aquatic species, including the White-bellied pangolin (Phataginus tricuspis) and the fish species Coptodon walteri. These species and their ecosystems are under significant pressure, and through CHA, we were able to delineate the critical habitats and implement plans to protect them.

Driving Sustainability with Critical Habitat Assessments

By working closely with Endeavour, Digby Wells is helping the company meet its ambitious biodiversity goals, ensuring that the expansion of mining operations does not come at the cost of West Africa's rich biodiversity. Through CHAs, we're not only protecting species like the pangolin but also strengthening the foundations for sustainable and responsible mining practices.



Through our Critical Habitat Assessments, we've been able to identify and protect key species and ecosystems, ensuring that their operations align with international best practices while making a real difference on the ground. This collaboration is a perfect example of how mining and environmental stewardship can go hand in hand, driving sustainable growth without compromising biodiversity.

Jonathan Plaistowe,
Ecologist




PAVING PROSPERITY


Economic Review in The Democratic Republic of Congo


The development of Barrick's Kibali Gold Mine in the Democratic Republic of the Congo (DRC) has sparked a transformation — turning a once quiet rural community into a thriving economic hub. With its strategic location near national borders, new infrastructure, and an influx of jobs, Kibali has had a profound impact on the local economy. With the mine's life projected until at least 2040, Barrick understood the importance of looking beyond the mine's active years, ensuring the community can continue to prosper long after operations cease.

To address this, Digby Wells introduced a new service: the Economic Review, which includes an Economic Impact Assessment and Legacy Development Strategy. Partnering with economists from The Dar Group, we aimed to gain a deeper understanding of Kibali's economic impact on the surrounding communities. By conducting workforce and household surveys, engaging local businesses, and holding interviews with key stakeholders, we sought to measure the ripple effects of the mine on the region's economic landscape.

Three communities were assessed, each offering a unique perspective on Kibali's reach:

 **No Impact:** The Makoro community, untouched by the mine, provided a baseline to compare with more affected areas.

 **Present Impact:** Durba, a community closely tied to Kibali's operations, showed how deeply integrated mining can drive local economies.

 **Previous Impact:** Kokiza, which was resettled in 2012 to make way for the mine, provided insights into the long-term effects of resettlement and ongoing community engagement.

Building the Future, Today

The creation of this Economic Review is just the beginning. For Digby Wells, it's an exciting new chapter, allowing us to continue helping clients craft sustainable, long-term solutions for communities around the globe. The insights from this work will be crucial in shaping Kibali's Legacy Development Strategy, which focuses on enhancing economic benefits, supporting emerging industries, and ensuring that capacity-building initiatives lead to lasting livelihoods in the communities impacted by mining.



“The Kibali Gold Mine's impact extends far beyond its operations. Through Digby Wells' Economic Review, we're helping Barrick to ensure that the benefits continue to flow into local communities, laying the foundation for sustainable growth long after the mine's life cycle. It's about building prosperity that lasts.”

Jess Pryor,
Divisional Manager:
Social and Stakeholder Engagement



PLANNING AHEAD

Planning Ahead:

Developing a Social Closure Framework

The closure of a mine often brings significant socio-economic, political, cultural, and institutional impacts to surrounding communities. These effects can ripple through both immediate and long-term aspects of social well-being, economic stability, and community dynamics. To help our clients leave a positive legacy after mining operations come to an end, Digby Wells' social department has developed a range of services designed to promote sustainable mine closure. One of the key tools we offer is the Social Closure Framework, aligned with industry best practices to mitigate the social impacts of mine closure.

What is a Social Closure Framework?

A Social Closure Framework serves as an overarching leadership document that guides a mine's social closure plan. It outlines the necessary planning and management processes to minimize the impacts of closure on local communities and prepare them for a sustainable. By focusing on sustainability and social transition, this framework ensures that the mine's closure doesn't leave behind a ghost town, but rather a community with new opportunities for economic and social development.

Key Components of Social Closure Planning



Social Closure Costing Models: Developed in 2023, our costing model helps mining companies budget for social transitions as a critical component of their closure planning — ensuring a focus on both environmental and social aspects.



ICMM Best Practices: We align our frameworks with the International Council on Mining and Metals (ICMM) principles, emphasizing integrated mine closure that prepares all stakeholders — workers, communities, and local governments — for the mine's eventual shutdown.







Sustainable Mine Closure: Our approach integrates environmental, social, and economic factors to create a positive post-mining legacy. By incorporating the Sustainable Development Goals (SDGs) into our Social Closure Reports, we link these efforts with the broader ESG objectives of our clients.



Social Closure Plan for Sibanye Stillwater Beatrix Mine


One notable project where Digby Wells developed a Social Closure Framework was for the Gold Operations at Sibanye Stillwater. This framework provides a structured methodology and approach for all Sibanye operations, ensuring that the social closure plans are cohesive and forward-looking across various sites.


In addition to the overarching framework, Digby Wells crafted a Social Closure Plan specifically for the Beatrix Mine. This plan addresses the socio-economic risks and impacts of mine closure on the workforce, contractors, host municipalities, and labour-sending communities. The methodology included:


-  Information and Gap Analysis
-  Risk Analysis and Workshops
-  Data Collection and Analysis using advanced tools
-  Recommendations on alternative skills, economies, and future opportunities

Benefits to the Client

The Social Closure Framework developed for Sibanye Stillwater offers several critical benefits:

 **Continuity Across Operations:** The framework is not limited to the Beatrix Mine; it provides a standardized approach that can be applied to Sibanye’s other gold operations.

 **Risk Awareness:** It enables Sibanye to understand and mitigate the risks associated with mine closure, ensuring a smoother transition for both the company and impacted communities.

 **Stakeholder Collaboration:** The framework fosters collaboration with key stakeholders — including local communities, municipalities, and the private sector — helping Sibanye engage effectively and responsibly as they plan for the future.



By developing thoughtful Social Closure Frameworks, Digby Wells is helping our clients navigate the complexities of mine closure while ensuring that communities continue to thrive long after mining activities have ended.

Chanel McCall,
Senior Social Scientist





MAA

MULTI-CRITERIA ALTERNATIVE ANALYSIS IN ACTION

Driving Sustainable Choices in Zambia

As part of Barrick's strategic realignment in 2019, the Lumwana Copper Mine underwent a transformation, positioning itself as a key player in Barrick's growing copper portfolio. With plans to expand the copper super pit, the mine is expected to generate around 1 billion cubic meters of tailings material over the next 30 years. This production surge made the design of a new or expanded Tailings Storage Facility (TSF) a critical priority.

To align with the Global Industry Standard on Tailings Management (GISTM) and ensure holistic and responsible tailings management, a multi-criteria alternative analysis must be undertaken.

Our MAA process, developed in collaboration with WSP and Knight Piésold, aimed to identify the best TSF option by evaluating a range of alternatives from an environmental, social, and engineering perspective.

A Four-Step Approach to Tailings Management

Our approach to MAA followed four key steps:



Screening Assessment



Data Analysis



Scenario Analysis



Identification of the Best Action Plan

We evaluated eight potential TSF options, each with different footprints and technologies, including dry tailings, conventional slurry tailings, and various disposal facilities. A comprehensive assessment was conducted to pinpoint the ideal location for the TSF, taking into account peatlands and other sensitive environmental features.

Balancing Environmental and Social Risks

Our role focused on assessing the environmental and social risks of each option. We examined sedimentation risks, downstream impacts, and the social factors associated with economic displacement and loss of cultivation land. Habitat loss, encroachment on protected areas, and potential impacts on wetlands were scrutinized closely, along with a downstream breach analysis to account for worst-case scenarios.

Peatlands: A Crucial Factor in Decision-Making

Our analysis revealed that the presence of an established peatland system played a significant role in the decision-making process. Peatlands are vital in combating climate change, sequestering carbon, preserving biodiversity, mitigating flood risks, and filtering water impurities. To minimize the environmental impact on this delicate ecosystem, five out of eight layout options were eliminated, leaving only three viable choices.

Delivering Sustainable Solutions for Lumwana's Expansion

The final MAA provided Barrick with the most sustainable and cost-effective option for the Lumwana expansion. By balancing operational needs with environmental and social considerations, we ensured that Barrick could move forward responsibly, adhering to best practices and minimizing long-term impacts.

Through our tailored MAA approach, Digby Wells empowered Barrick with the insights needed to expand the Lumwana Copper Mine while safeguarding the environment and supporting the local communities.

Anita Gutu, Project Manager





BALANCING

GROWTH AND FLOW

Supporting Sustainable Expansion at Pueblo Viejo

As Barrick sets its sights on expanding the Pueblo Viejo Gold Mine in the Dominican Republic, the challenge wasn't just in scaling up — it was in balancing environmental sustainability with industrial growth. This required careful navigation of local water systems and community dynamics, ensuring that both ecological and human needs were met.

To tackle this, Barrick partnered with Digby Wells and Knight Piésold to conduct a comprehensive Environmental Water Requirements (EWR) Assessment. This assessment was crucial for evaluating the impacts of the mine's expansion, particularly the construction of a new Tailings Storage Facility (TSF) on the Arroyo Vuelta river catchment, which feeds into the Rio Maguaca — an essential water source for both biodiversity and surrounding communities.

Balancing Flow Requirements and Expansion Needs

Expanding the Pueblo Viejo mine posed significant challenges, especially in ensuring compliance with the Global Industry Standard on Tailings Management (GISTM). This expansion required careful consideration of both community relocation and the management of water resources.

As part of the EWR assessment, Digby Wells evaluated the effects of reduced water flow in the Arroyo Vuelta and Lower Maguaca rivers. We focused on determining the minimum water flow rates necessary to preserve both the ecological balance and the community's water needs. To achieve this, we employed a multifaceted approach:



Hydrological Data Analysis: We established baseline water flow rates using both existing and modelled data.



Habitat Suitability Modelling: We evaluated the ecological needs of aquatic biodiversity, such as algae, invertebrates, and fish.



Aquatic Assessment: The ecological classification of the rivers was assessed to identify water flow requirements for sustaining biodiversity.



Basic Human Needs Assessment: We assessed how households would be impacted by changes in water availability, particularly in the Arroyo Vuelta catchment.



Discharge Requirements: We calculated the amount of water that would need to be discharged back into the system to meet both ecological and human needs.



Scenario Analysis: We explored various scenarios to identify the best layout for minimizing environmental impacts while meeting operational requirements.

Delivering Solutions: Minimizing Impact, Maximizing Sustainability

Through this rigorous assessment, we presented Barrick with three viable management solutions. Each option included recommendations on water discharge points and flow rates designed to minimize the loss of flows, protect ecological habitats, and safeguard community water usage.

Interestingly, our analysis revealed that only 5% of the local population relied on surface water, with the majority using groundwater. This allowed us to focus heavily on preserving the ecological health of the river systems. We also provided financial comparisons for each option, ensuring Barrick could make informed decisions that balanced operational goals with environmental stewardship.



Water Flow Requirements: The assessment determined that maintaining just 32% of the Arroyo Vuelta's natural flow would be sufficient to support aquatic biodiversity and downstream community needs.



Community Relocation: In alignment with GISTM standards, we advised Barrick on relocating downstream communities to ensure their safety and well-being while facilitating mine expansion.

Setting the Stage for Responsible Growth

Thanks to strategic collaboration and careful planning, Barrick now has the tools to navigate the complex environmental impacts of its Pueblo Viejo expansion. By embedding these practices into the heart of its expansion strategy, Barrick Gold Corporation reaffirms its commitment to responsible mining, driving both economic growth and environmental stewardship in the Dominican Republic.



With Digby Wells' support, Barrick is actively meeting regulatory requirements while also prioritizing ecological sustainability and community welfare.

Byron Bester,
Divisional Manager:
Ecological Services





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