THROUGH THE LUPE



Beyond the Lab - Preserving the True Brilliance of Natural Diamonds

As lab-grown diamonds surface in global markets, the need to protect the authenticity, value and legacy of natural diamonds has never been more important.

Diamonds have long represented permanence, rarity and emotional depth. Qualities rooted in the very process that forms them deep within the earth over billions of years. In recent years, however, the rise of lab-grown diamonds (LGDs) has introduced a new conversation to the global diamond industry.

While LGDs may resemble natural diamonds to the naked eye, the two are vastly different in origin, meaning and enduring value. As the custodians of Namibia's natural diamond story, it is vital to understand these differences and to ensure that the legacy of nature's creation remains untarnished.

Understanding the Market Disruption

The emergence of LGDs has fundamentally reshaped the global diamond trade. What began as a gradual shift has now become an undeniable reality. The disruption is no longer on the horizon; it is here.

Driven by lower production costs, aggressive marketing and changing consumer preferences that prioritise price and convenience over provenance, LGDs have expanded rapidly across key market segments. This expansion has brought both opportunities and challenges. While it has increased accessibility to diamond jewellery, it has also blurred the lines between what is natural and what is manufactured, creating confusion among consumers and retailers alike.

In particular, the bridal segment, which is long regarded as the emotional and economic cornerstone of the natural diamond market has been one of the most affected. This infiltration threatens the essence of what gives a natural diamond its worth: its rarity, authenticity and unrepeatable journey through nature.

In the current market landscape, disclosure has become a critical and strictly enforced standard. Retailers are required to clearly inform customers about the origin of the diamonds they sell. This transparency, now embedded in global trade practices is essential to maintaining consumer trust.

It has also become increasingly evident that natural and lab-grown diamonds will coexist in the marketplace. Their coexistence, however, demands clear product differentiation to ensure that consumers understand not only what they are buying, but what each diamond represents in terms of rarity, prominence and long-term value.

Beyond perception, the effects of this market shift extend to diamond-producing nations. As LGDs gain market share, producer countries like Namibia and Botswana face tangible risks of reduced export revenues, lower foreign earnings and potential community impact. This reality reinforces the need for stronger industry communication, transparent consumer education and consistent branding that elevates the natural diamond story to protect both its emotional and economic significance.

Nature's Masterpiece vs. Man's Imitation

A natural diamond is a geological miracle, which formed over time, under immense pressure and heat, within the earth's mantle. Each one is unique, shaped by nature's forces and brought to light through responsible mining and craftsmanship.

Lab-grown diamonds, by contrast, are manufactured in laboratories using high-pressure high-temperature (HPHT) method or chemical vapour deposition (CVD) technologies that mimic aspects of natural formation. Although they share the same chemical and physical characteristics, the resemblance ends there. A lab-grown diamond is a product of machinery, not of nature; it is reproducible, abundant and devoid of the geological journey that gives a natural diamond its soul.

A true diamond's beauty lies not only in how it looks, but in where it comes from and its representation of rarity, endurance and authenticity.



A Slow Awakening for Natural Diamonds

The natural diamond sector's initial hesitation to respond to lab-grown diamonds (LGDs) proved costly. For years, the industry underestimated how swiftly consumer attitudes could shift. As a result, LGDs filled a narrative gap, positioning themselves as innovative, ethical and affordable alternatives.

Today, the challenge before the natural diamond industry is to reclaim its emotional and symbolic territory of the enduring symbolism of love, legacy and permanence that no laboratory can replicate. While LGDs may appeal to modern consumer values of accessibility and innovation, natural diamonds embody timeless ones of rarity, authenticity and the permanence of nature's creation.

Industry initiatives are now working collectively to restore and strengthen this narrative. The Natural Diamond Council (NDC), which has long led the global promotion of natural diamonds through campaigns that highlight their rarity, provenance and positive social impact, remains at the forefront of these efforts. The Luanda Accord, signed by African diamond-producing nations in June 2025, serves as a complementary framework that reinforces the NDC's ongoing work. It underscores Africa's shared commitment to ethical trade, transparency and collaborative marketing that celebrates the continent's leadership in the global diamond story.

For Namibia and other producer nations, this renewed collaboration opens powerful branding opportunities rooted in origin storytelling, which connects each diamond to its journey from the earth to the hands it transforms, and to the communities it uplifts along the way. Through these authentic narratives, the value of a natural diamond extends far beyond its brilliance. It reflects heritage, humanity and hope.

The Illusion of Sustainability

Much of the appeal around lab-grown diamonds stems from their affordability and the perception that they are more sustainable. However, this narrative often overlooks critical realities.

Creating a diamond in a lab is an extremely energy-intensive process, as machines run continuously under intense heat and pressure. Independent studies, including reports by



S&P Global Trucost ¹(2022) and the Natural Diamond Council have shown that lab-grown diamond production can consume up to three times more electricity per carat than responsibly mined natural diamonds. As a result, their carbon footprint can, in some cases, exceed that of natural diamonds, particularly when non-renewable energy sources are used.

Meanwhile, natural diamonds sustain entire ecosystems of livelihoods. Across the value chain, from miners and sorters to cutters, polishers, goldsmiths, transporters and retailers. Each diamond supports thousands of individuals and families. Beyond employment, in Namibia and throughout Africa, the natural diamond industry fuels national development, funding roads, schools, hospitals and social programmes that improve lives. Every natural diamond purchased uplifts people and contributes to shared prosperity.

In reality, sustainability in the diamond sector is multidimensional. LGDs may reduce ecological disturbance, but natural diamonds often have a broader social footprint that drives community development and economic inclusion. True sustainability is not only environmental, but also social and economic. In this sense, natural diamonds remain the most sustainable choice.

Transparency, Regulation and Consumer Protection

In the past, the certification and labelling of lab-grown diamonds were areas of uncertainty, with few global standards to guide retailers and consumers. However, the industry has made notable progress in recent years. Leading grading laboratories such as the Gemological Institute of America (GIA) now issues certificates that clearly identify whether a diamond is natural, or lab grown.

This evolution marks a shift from ambiguity to accountability. What was once a matter of debate is now an established practice, with disclosure forming the foundation of ethical trade in both categories of diamonds. Retailers are increasingly required to label, advertise and document stones with complete transparency, ensuring that consumers are fully informed about what they purchase.

Yet, uniformity across jurisdictions is still evolving. Different countries and markets apply varying standards of disclosure, which means vigilance and consistency remain crucial. Every lab-grown diamond must be clearly identified as such at every point of sale whether in advertising, certification and/or packaging to prevent confusion or misrepresentation.

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¹ The Trucost Environmental data measures environmental impact across key dimensions for over 20,000 companies.

In a marketplace that continues to grow more complex, clarity remains the industry's greatest safeguard. For diamond-producing nations like Namibia, transparency is both a moral obligation and a strategic advantage, ensuring that the natural diamond trade retains its integrity, credibility and contribution to sustainable national development.

Safeguarding the Emotional and Economic Value of Natural Diamonds

Beyond price and production lies the true essence of what makes natural diamonds incomparable, and that is their meaning. They are the symbols of love, heritage and achievement; heirlooms passed from one generation to the next.

A lab-grown diamond, no matter how visually convincing, cannot replicate the emotional gravity of something that has taken billions of years to form. It lacks provenance, story and permanence. Once purchased, its value declines almost immediately, which reflects its artificial abundance.

By contrast, natural diamonds retain and often increase in value precisely because they cannot be replicated. Their rarity ensures that they will always remain desirable, both as adornments and as investments.

Africa's Role in Upholding Authenticity

For Africa, the leading producer of natural diamonds globally, the conversation around LGDs underscores the importance of beneficiation and brand ownership.

By strengthening local cutting, polishing and jewellery-manufacturing industries, producer nations can secure more value within their borders while reinforcing consumer trust in natural stones and promoting origin-based branding. *Mined, polished and set in Namibia* connects authenticity with national pride, ensuring that African diamonds are celebrated not only for their beauty but for their positive impact.

The Path Forward: Coexistence with Clarity

The diamond industry is evolving, but it need not be divided. Lab-grown diamonds may continue to occupy a place in fashion or mass-market jewellery, yet they will never replace the heritage, integrity and rarity of natural diamonds.

The two can coexist, but only if consumers clearly understand the difference. Protecting the reputation of natural diamonds requires continued education, strong regulation and unified communication across the global industry.



What Is Made Can Be Reproduced. What Is Born Cannot.

The enduring truth of the diamond industry is simple: value is rooted in authenticity. Lab-grown diamonds may glitter, but they remain a product of science, not time.

Natural diamonds, on the other hand, tell a story billions of years in the making. A story of endurance, beauty and contribution to humanity. They are nature's promise fulfilled, not manufactured.

As the world learns more about lab-grown diamonds, it is our collective responsibility to ensure that the legacy of natural diamonds continues to shine brighter, rarer and more meaningful than ever before.

Ultimately, the true measure of a diamond extends far beyond its sparkle. It lies in its rarity, authenticity and contribution to human progress. That distinction remains firmly in favour of natural diamonds.

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