



## **IMPACT ESG INVESTMENT**

Digitising physical objects to enable the  
circular and closed loop economy

(NASDAQ:SMX)

# Disclaimers

This presentation (together with any oral statements made in connection herewith, the "Presentation"), is provided for informational purposes only and has been prepared to assist interested parties in evaluating SMX (Security Matters) Public Limited Company ("SMX") and for no other purpose.

## **No Offer or Solicitation**

This Presentation is not an offer, or a solicitation of an offer, to buy or sell any investment or other specific product. This Presentation is for informational purposes only and does not constitute or include an offer to sell, or a solicitation of an offer to purchase or subscribe for, equity interests or securities of any kind or a solicitation of any vote of approval, nor shall there be any sale, issuance or transfer of any such securities in any state or jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of such jurisdiction. Any such offer or solicitation will be made only in connection with the delivery of a prospectus meeting the requirements of the Securities Act of 1933, as amended ("Securities Act"), or exemptions therefrom.

This Presentation is not intended to form the basis of any investment decision by the recipient and does not constitute investment, tax or legal advice. You should consult your own advisers concerning any legal, financial, tax or other considerations concerning the opportunity described herein as well as the merits and risks involved. The general explanations included in this Presentation cannot address, and are not intended to address, your specific investment objectives, financial situations or financial needs. Readers should carefully review the risk factors and other cautionary statements described therein before making an investment decision.

No representation, express or implied, is or will be given by SMX or its affiliates and advisors as to the accuracy or completeness of the information contained in this Presentation.

INVESTMENT IN ANY SECURITIES DESCRIBED HEREIN HAS NOT BEEN APPROVED OR DISAPPROVED BY THE UNITED STATES SECURITIES AND EXCHANGE COMMISSION OR ANY OTHER REGULATORY AUTHORITY NOR HAS ANY AUTHORITY PASSED UPON OR ENDORSED THE MERITS OF THE ACCURACY OR ADEQUACY OF THE INFORMATION CONTAINED THEREIN.

## **Industry and Market Information**

Information contained in this Presentation concerning SMX's industry and the markets in which it operates, including SMX's general expectations and market position, market opportunity and market size, is based on information from SMX's management's estimates and research, as well as from industry and general publications and research, surveys and studies conducted by third parties. In some cases, SMX may not expressly refer to the sources from which this information is derived. Management estimates are derived from industry and general publications and research, surveys and studies conducted by third parties and SMX's knowledge of its industry and assumptions based on such information and knowledge, which SMX believes to be reasonable. In addition, assumptions and estimates of SMX's and its industry's future performance are necessarily subject to a high degree of uncertainty and risk due to a variety of factors. These and other factors could cause SMX's future performance and actual market growth, opportunity and size and the like to differ materially from our assumptions and estimates.

## **Trademarks**

All rights to the trademarks, copyrights, logos and other intellectual property listed herein belong to their respective owners and SMX's use thereof does not imply an affiliation with, or endorsement by the owners of such trademarks, copyrights, logos and other intellectual property. Solely for convenience, trademarks and trade names referred to in this Presentation may not appear with the ® or TM symbols, but such references are not intended to indicate, in any way, that SMX's will not assert, to the fullest extent under applicable law, their rights or the right of the applicable licensor to these trademarks, service marks and trade names.

## **Disclaimer and Cautionary Note Regarding Forward-Looking Statements**

This Presentation includes “forward-looking statements” within the meaning of the “safe harbor” provisions of the United States Private Securities Litigation Reform Act of 1995. Forward-looking statements may be identified by the use of words such as “forecast,” “may,” “can,” “will,” “seek,” “target,” “anticipate,” “believe,” “expect,” “estimate,” “plan,” “outlook,” and “project” and other similar expressions that predict or indicate future events or trends that are not statements of historical matters. Such forward-looking statements with respect to revenues, earnings, performance, strategies, the market, prospects and other aspects of the business of SMX are based on current expectations that are subject to risks and uncertainties. A number of factors, many of which are outside of the control of SMX, could cause actual results or outcomes to differ materially from those indicated by such forward-looking statements. These forward-looking statements are subject to a number of risks and uncertainties, including (i) changes in domestic and foreign business, market, financial, political and legal conditions; (ii) failure to realize the anticipated benefits of SMX’s recently closed business combination with Lionheart III Corp.; (iii) SMX’s limited operating history; (iv) SMX’s ability to grow and manage its growth effectively; (v) SMX’s ability to execute its business plan; (vi) SMX’s estimates of the size of the markets for its products; (vii) the rate and degree of market acceptance of SMX’s products; (viii) SMX’s ability to identify and integrate acquisitions; (ix) SMX’s future investments in its technology and operations; (x) potential litigation involving SMX or the validity or enforceability of SMX’s intellectual property; (xi) risks relating to the uncertainty of the projected financial information with respect to SMX; (xii) the effects of competition on SMX’s business; (xiii) developments and changes in laws and regulations; (xiv) the impact of significant investigative, regulatory or legal proceedings; (xv) general economic and market conditions impacting demand SMX’s products and services; (xvi) the amount of cash available following SMX’s recently closed business combination and ability to repay indebtedness and satisfy liabilities; (xvii) the ability to meet Nasdaq’s listing standards; (xviii) the ability of SMX to issue equity or equity-linked securities in the future; and (xix) those factors discussed under the heading “Risk Factors” and elsewhere in the documents of SMX filed, or to be filed, with the Securities and Exchange Commission.

If any of these risks materialize or our assumptions prove incorrect, actual results could differ materially from the results implied by these forward-looking statements. There may be additional risks that SMX presently has not identified or that it currently believes are immaterial that could also cause actual results to differ materially from those contained in the forward-looking statements. In addition, forward-looking statements reflect SMX’s expectations, plans or forecasts or future events and views as of the date of this Presentation. SMX anticipates that subsequent events and developments will cause its assessments to change. You are cautioned not to place undue reliance upon any forward-looking statements, which speak only as of the date made. SMX undertakes no commitment to update or revise the forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required by law.

# SMX Gives Materials Memory

# The System Within



Within your business lies a world of potential; potential that can be realized by something so miniscule you won't even know it's there.

An invisible solution that can turn your business into an intelligent ecosystem.

Building an inter-connected network.

Putting sustainability at the heart of what you do.

By empowering you at a molecular level, we'll help your business drive change on a greater scale.

Because inside your operation lies the power to transform tomorrow.

SMX. The system within.

## The System Within Value Proposition

Sustainably-run businesses can be more effective businesses, that want to make better choices for their company and the planet.

SMX uses technology designed to turn businesses into ecosystems that work as a united whole, unlike less adaptable technologies and platforms that can't deliver the system change required.

# SMX Origin Story

## ‘From in the dark to informed intelligence’



There are moments the ground shifts beneath our feet. Suddenly, the entire global landscape changes, and business can no longer operate in the way it did before. Today, we are experiencing that change. The world is demanding greater and greater transparency, efficiency and resilience - a call to do things better; a challenge loaded with so much exciting possibility.

That is why SMX decided to find a new way to unlock knowledge – to help counter the lack of transparency and create a system where bad actors have nowhere to hide. With ‘augmented materials,’ you can know the granular detail of a material – its provenance, its purity, its integrity. That way, transparency can be built-in, and industry can gain the intelligence it needs to work in smarter and more productive ways - linking parts of the value chain and enabling use, reuse and reuse again to realize the potential of materials.

It’s a system designed for the 21<sup>st</sup> century economy. A system that is highly innovative and can empower businesses to build the real-world circular economy. A system that can help change the way we operate from the inside out. **The system within.**





## **Multiple-stages and multiple-loops traceability:**

The resilience of the SMX marker and block-chain platform is designed to ensure that the data is never compromised or lost, enabling more accurate and reliable traceability as the material is recycled/reused multiple times



## **Enhanced data flow and circularity:**

The SMX marker enables you to store data at a molecular level within products and materials, allowing for increased transparency of marked content, for greater granularity and ease of recycling



## **Exciting knowledge gathering potential:**

The SMX reader is designed to enable easy data gathering at any point within the supply chain, without affecting the product or material, eliminate blind spots, and provide the complete picture



## **Multiple application possibilities:**

Each SMX marker is unique and can be applied to any material, providing access to a large number of markers and a system with greater potential for different applications



To unlock the way global business will operate tomorrow, by enabling a real-world circular economy.

We can help make the transition to a circular economy positive, productive and profitable for everyone in the value chain – and for the planet.

“ Our goal is to be the global standard & best practice for recording & connecting all physical goods with a digital twin on the blockchain ”

# What is the 'Circular Economy'?

**The circular economy is a new way of looking at the relationships between markets, customers and natural resources.**

Move away from the linear economy...



Enable the Circular Economy...



The circular economy moves away from the traditional “take-make-dispose” economic model to one that is regenerative by design, with the goal of retaining as much value as possible from resources, products, parts and materials to create a system that allows for longer life, optimal reuse, refurbishment, remanufacturing and recycling.



Companies who implement the circular economy concentrate on rethinking products and services using principles based on durability, renewability, reuse, repair, replacement, upgrades, refurbishment and reduced material use.



By applying these principles, companies can design out waste, increase resource productivity and decouple growth from natural resource consumption.

**This is the biggest opportunity to transform production and consumption since the First Industrial Revolution 250 years ago. By unleashing circular innovation, we can boost the global economy's resilience, support people and communities around the world and help fulfil the Paris Agreement and the UN Sustainable Development Goals.**

*- World Business Council for Sustainable Development, CEO Guide to the Circular Economy, 2017*



The core challenge of climate change and protecting the environment is not only limited to carbon emissions or coal, but about reusing products again, so we can reduce the amount of raw materials we need.

It is uneconomical and inefficient to use 100% new materials in every product you manufacture.

By reclaiming & recycling the materials from unwanted products at the end of their lifecycle, it can be more efficient and economical for the business and the industry as a whole.

# SMX Technology Innovation

## High Impact Potential for Positive Change

SMX's technology is an enabler for global companies across various industries to transition more successfully to a sustainable circular economy. By adopting SMX's technology, they can tangibly measure and track the raw material from origination, through the supply chain and at the end of life – where the amount of material recycled/reused from that product item can be measured and as well as the number of times that specific material/item has been recycled/reused.

This gives brands/companies the option and ability to record this on SMX's planned digital blockchain platform to more accurately claim carbon & plastic credits that are tangibly linked to a physical recycled commodity – potentially resulting in a valuable tradeable asset.

The overall transition to the Circular Economy, by incentivizing players along the value chain, can be made by commoditizing and increasing the value of the recycled materials - motivating the circular economy via the financial markets.

**SMX believes it is the only technology that has tangibly demonstrated a full transparent circularity successfully.**

## Market Applications and Appeal

SMX's technology can be applied at a molecular level on solids, liquids or gas at multiple points in the supply chain as a drop in solution. This enables SMX to work strategically in the following segmented markets, across a variety of materials.

Segmented Markets	Materials
<b>Circular Economy / Supply Chain</b>	Plastics, Rubber
<b>Ethical Mining &amp; Raw Minerals</b>	Gold, Diamonds, Timber/Lumber, Cement, Ore & Rare Earths
<b>Electronics &amp; Components</b>	Electronics & Silicon Wafer
<b>Fashion &amp; Cosmetics</b>	Leather, Organic Silk, Organic Cotton, Wool, Vegan Leather, Polyester, EVA, TPU, ABX, PET
<b>Sustainability &amp; Food Security</b>	Wine, Animal Feed, Palm Oil, Seeds

**SMX's potential for positive ESG impact is exciting, and its ability to more accurately and transparently measure has been proven.**

# Enabling Technology to Successfully Transition to a Circular Economy



As global businesses faces new and complex challenges relating to carbon neutrality and meeting new governmental and regional regulations and standards, **SMX is able to offer players along the value chain access to its marking, tracking, measuring and digital platform technology to transition more successfully to a low-carbon economy.**

## **SMX is a key technological tool in enabling brands/companies to:**

- Use a transparent, measurable, tangible technology that can more accurately identify the origins and material composition of raw materials within the finished consumer product and its packaging, enabling it to re-enter the economy for recycling/reuse.
- Be better positioned to create a leading industry standard relating to carbon neutrality, ethics and the ability to meet new government regulations and standards.
- Adopt a transparent value chain stakeholder compliance approach.



## CIRCULAR ECONOMY

The raw material is marked and recorded on blockchain to enable more accurate identification for recycling and allows the company to lodge a credible carbon credit claim.

## BLOCKCHAIN PLATFORM (optional)

Gives the ability to detect diversion of products and verify Product Authenticity in real time without destroying the item at multiple points in the supply chain and at retail level.

## COMPLIANCE & LIABILITY

Enabler of compliance for ESG regulations, international customs and industry quality regulation. Markers are compatible with food regulation.



## SUPPLY CHAIN INTEGRITY

Greater protection from Product Diversion/Loss or Dilution or Substitution.

## MORE COMPREHENSIVE TRACEABILITY

Greater traceability of product origin (i.e. Authenticate Ethical Sources & Origination) and supply chain history.

Ability to read product's history by scanning the item. In addition to date & origin and material composition, it can identify if any parts have been changed or repaired (where & when).

1

**Innovative**

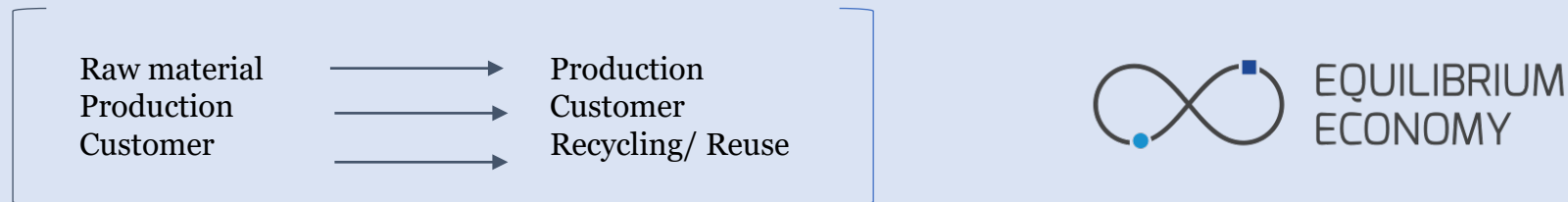
2

**Sustainable**

3

**Essential**

## Technology for 3 product lifecycles



- SMX believes permanent marking of any object (either solid, liquid or gas) makes the technology unique.
- SMX offers an advanced next generation technology that can invisibly mark and store multiple data at a molecular level, in solids, liquids or gas.
- The code is created by a combination of molecules detected by an innovative energy band.
- Marker embedded in or on materials and products can be read in real time via easy-to-use portable hand-held scanner and is protected by a blockchain ledger.
- SMX believes its technology is difficult to replicate by any competitors and is superior to alternative forms of supply chain security.

### Accountability

**Transparency & ownership of lifecycle data from origins of raw materials to key production phases & end of product life – recycling.**

- A mine-to-marketplace ethical supply chain assurance & transparency technological platform that parties along the value chain can utilize to monitor the lifecycle and origins in real time.
- Enables parties to authenticate and provide proof of quality, quantity and origin of materials for credible ESG reporting for stakeholders, insurance, trading platforms, logistics, financing, international customs and industry regulations.

### **For Circular Closed Loop Economy to Function & Operate**

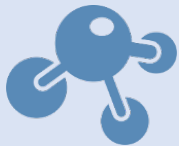
**By being able to create a digital twin for physical objects, SMX enables different players in the value chain of production to create a global ledger of physical goods which may result in new business and revenue streams.**

- SMX can help form a new revenue model and business stream for companies balancing the use of both recycled and virgin raw materials during production.

# End to End Technology Solution for Circularity



SMX is an environmentally sustainable technology that can more accurately identify the origins and material composition of raw materials within the finished consumer product and its packaging, enabling it to re-enter the economy for recycling/reuse.



## A chemical-based hidden marker system

- Mark any object either solid, liquid or gas
- Apply marks to multiple layers
- Combination of 500,000+ marker molecules to help make each mark unique
- Designed not to change the composition, quality and characteristics such as colour, weight, taste and smell of the material.



## A reader to identify these codes

- Patented sensitive reader receives response signal from marker
- Ability to read the data embedded in the item within seconds without having to destroy the product or send the item to a special lab for testing.



## A blockchain record to store and verify ownership data

- Records datasets through the supply chain
- Transfer of ownership
- Enables proof of authenticity and quality assurance
- Visibility of supply chain movements



The World Business Council for Sustainable Development (WBCSD) is a global, CEO-led organization of over 200 leading businesses working together to accelerate the transition to a sustainable world.

“

*WBCSD is delighted to welcome Security Matters as our newest member. There is a huge potential for this kind of technology to revolutionize industries including fashion, electronics, agriculture, gold and precious stones. We look forward to working with Security Matters to help advance our shared goals*

”

***Peter Bakker, President and CEO of WBCSD, 10 June 2020***

# SMX Technical Objectives and Challenges



# A Significant & Growing Market



**US\$4.5  
Trillion**

The circular economy is a US\$4.5 trillion opportunity, presenting potential for global economic growth, accelerating society towards a sustainable future.



**US\$60.7  
Billion**

The Global Plastic Recycling Market is estimated to reach US\$60.7bn by 2025



**US\$500  
Billion**

Global sales of counterfeit and pirated goods are estimated at a value of US\$500bn a year



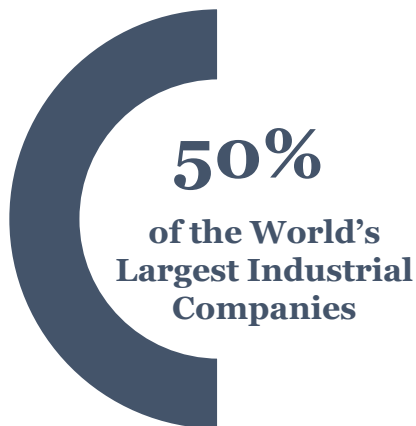
**148m  
Tonnes**

Global textile waste is expected to reach 148 million tons annually by 2030

Sources: McKinsey surveys of global Supply Chain leaders (May 15 – May 22, 2020, N=60; U.S. Intellectual Property and Counterfeit Goods— Landscape Review of Existing/Emerging Research; OECD ESG Investing: Practices, Progress and Challenges; environmental leader; analytics insights. <https://www.fashionrevolution.org/>. <https://www.prnewswire.com/news-releases/global-plastic-recycling-market-report-2020-301222208.html>.

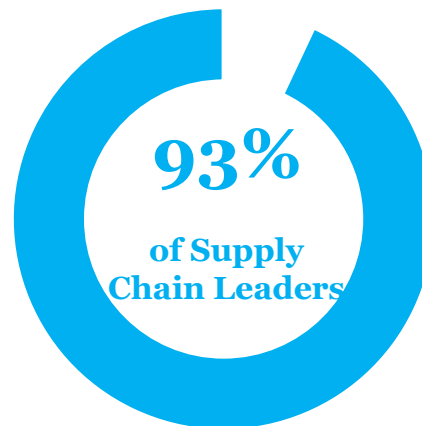
# The Shift has Already Begun

**Movement towards  
the digital economy**



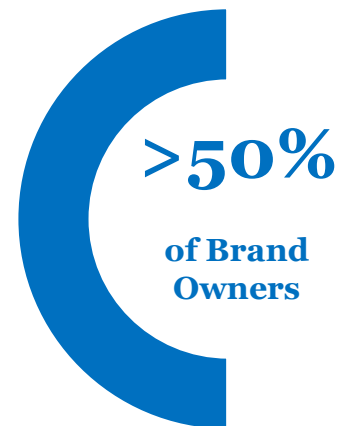
Will rely on digital twins innovative technology to gain an added insight into their products, assets, processes, operations.

**Continued fight  
against counterfeit**



Plan to increase the level of resilience across their supply chain as a result of COVID-19.

**Shift from linear  
to circular  
economies**



Are committing to establishing circular value chains.

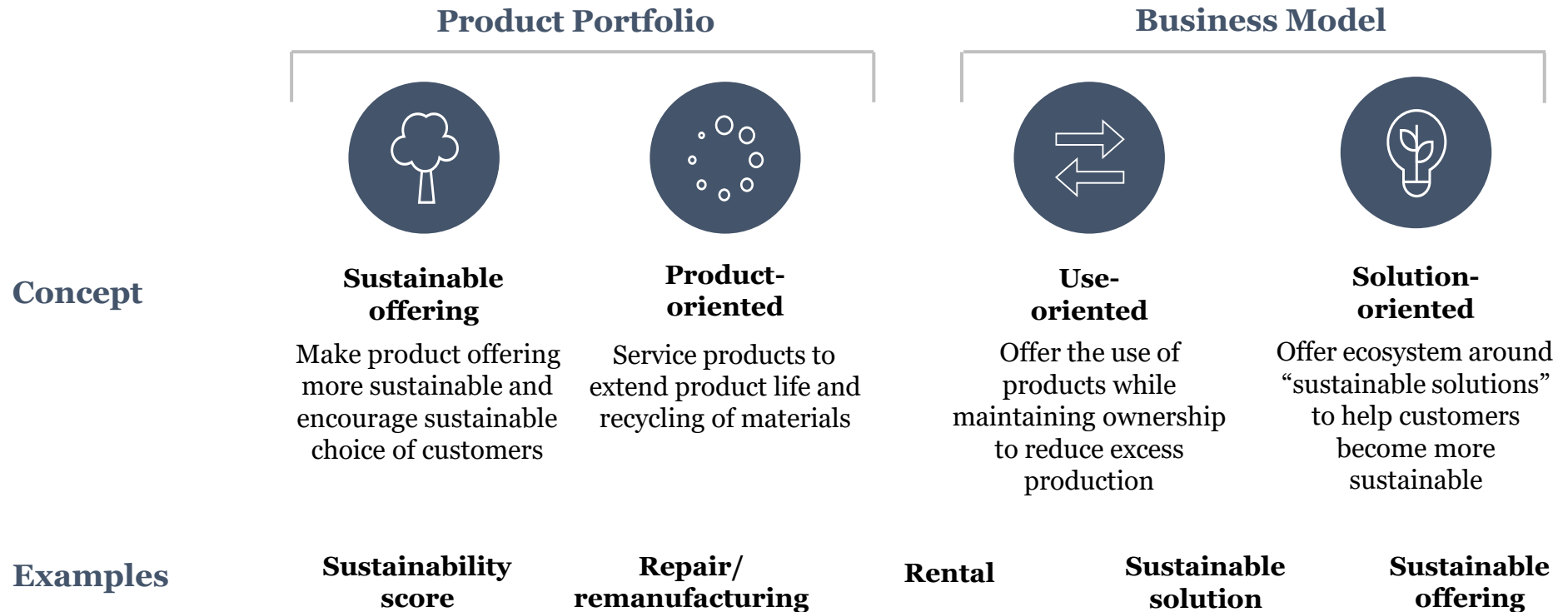
**Increasing ESG  
investment and awareness**



Under professional management representing ESG investments.

Source: McKinsey surveys of global Supply Chain leaders (May 15 – May 22, 2020, N=60; U.S. Intellectual Property and Counterfeit Goods— Landscape Review of Existing/Emerging Research; OECD ESG Investing: Practices, Progress and Challenges; environmental leader; analytics insights

# The Shift has Already Begun



# SMX Market Opportunity

## For Raw Commodities, Precious Metals & Diamonds

<b>Transaction transparency</b>	<ul style="list-style-type: none"><li>• Help reduce credit risk and compliance burden</li><li>• Help expedite funding &amp; credit lines and reduce cost of funds to miners</li><li>• Enable more accurate reporting of quantity and quality of mineral being mined and refined to financiers, traders and insurance</li><li>• Transparency and assurance based on science and technology – not paper based</li></ul>
<b>Authentication</b>	<ul style="list-style-type: none"><li>• Help detect fraud and adulteration on the spot</li><li>• Prevent unauthorised materials from entering production chain</li></ul>
<b>Blockchain supply chain management</b>	<ul style="list-style-type: none"><li>• Linking of physical mineral with its digital twin</li><li>• More secure digital records</li><li>• Greater transparency between supply chain stakeholders</li><li>• Blockchain ledger</li></ul>
<b>Sustainability &amp; Liability</b>	<ul style="list-style-type: none"><li>• Source provenance - identification and verification</li><li>• Trace back at end-of-life for recycling</li><li>• Trace back at misuse, defect or accident</li></ul>
<b>Monetize benefits of the Market in a closed loop economy</b>	<ul style="list-style-type: none"><li>• Help de-risk &amp; lower cost of inventory financing models</li><li>• Introduce a globally recognized industry standard for ‘grading’ based on quality and traceability where it can be priced and traded on the open market accordingly</li></ul>







## Partnership with The Perth Mint



*“This is a particularly significant development given the increasing focus on Environmental, Social and Governance (ESG) practices across the world pertaining to the gold supply chain.*

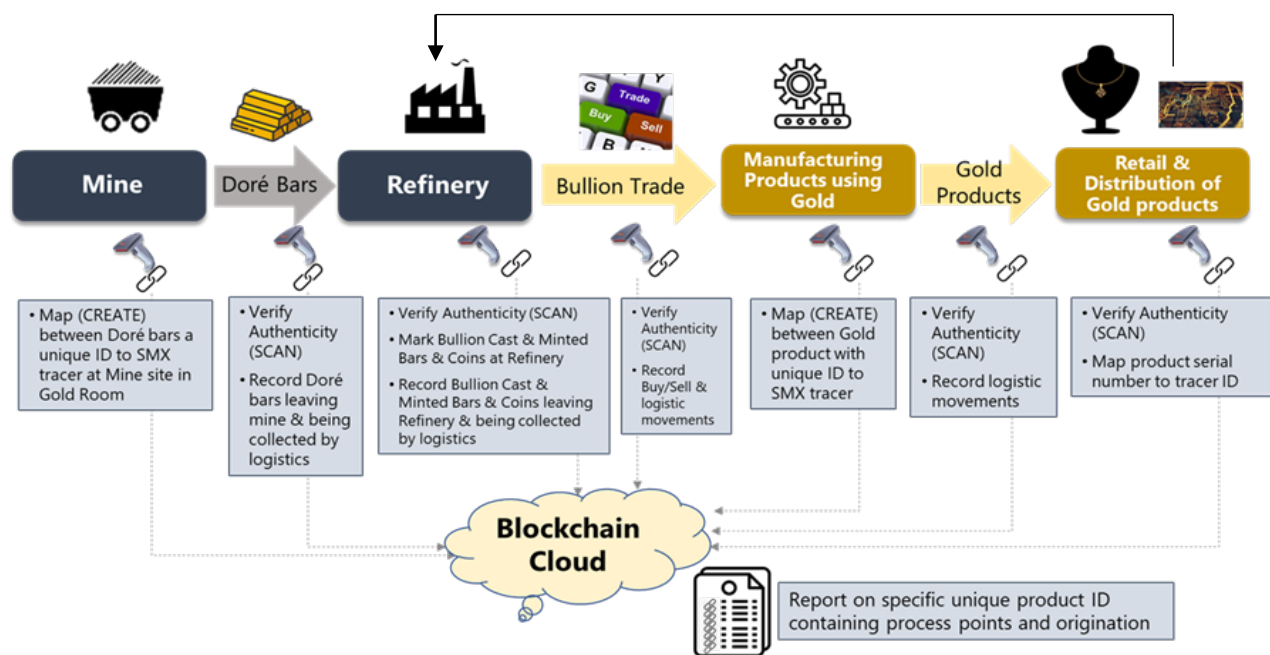
*This game changing technology will report the origin of the gold and how the metal moves through the entire production and distribution process. This complete transparency will instil even greater trust in a commodity which already provides the ultimate refuge during times of economic and geopolitical turmoil.”*

Richard Hayes, CEO – The Perth Mint, 5 February 2020

## TRANSPARENCY FROM MINE TO RECYCLING AND BACK TO REFINING.

An ethical gold supply chain assurance solution that spans the gold value chain from mine to refinery to terminal market through recycling and back again to refinery.

- To better enable the parties in the Gold value chain to authenticate and provide proof of quality, quantity and origin of gold for credible ESG reporting for stakeholders, insurance, trading platforms, logistics, financing, international customs and industry regulations.
- To create a digital twin that is recorded on a digital blockchain platform for physical products - enabling different players in the Gold value chain of production to create a global ledger of physical goods.
- To enhance, compliment & promote the current ESG frameworks provided by WGC (Responsible Gold Mining Principles) and LBMA (Responsible Sourcing Programme), by offering its members a technology and blockchain platform that can promote and help drive integrity, anti-counterfeiting, corporate transparency, accountability and sustainability.





The background of the slide is a fashion advertisement. It features a woman in a black dress with a white stripe on the sleeve, wearing a black headscarf with yellow stripes. She is looking directly at the camera with her hands behind her head. A large, flowing black fabric with a pattern of yellow and pink flowers and leaves is draped over her. The text "Fashion Sustainability Competence Centre" is overlaid in white serif font.

# Fashion Sustainability Competence Centre

# Enabling Fashion Brands to Meet Carbon Neutrality & ESG Targets

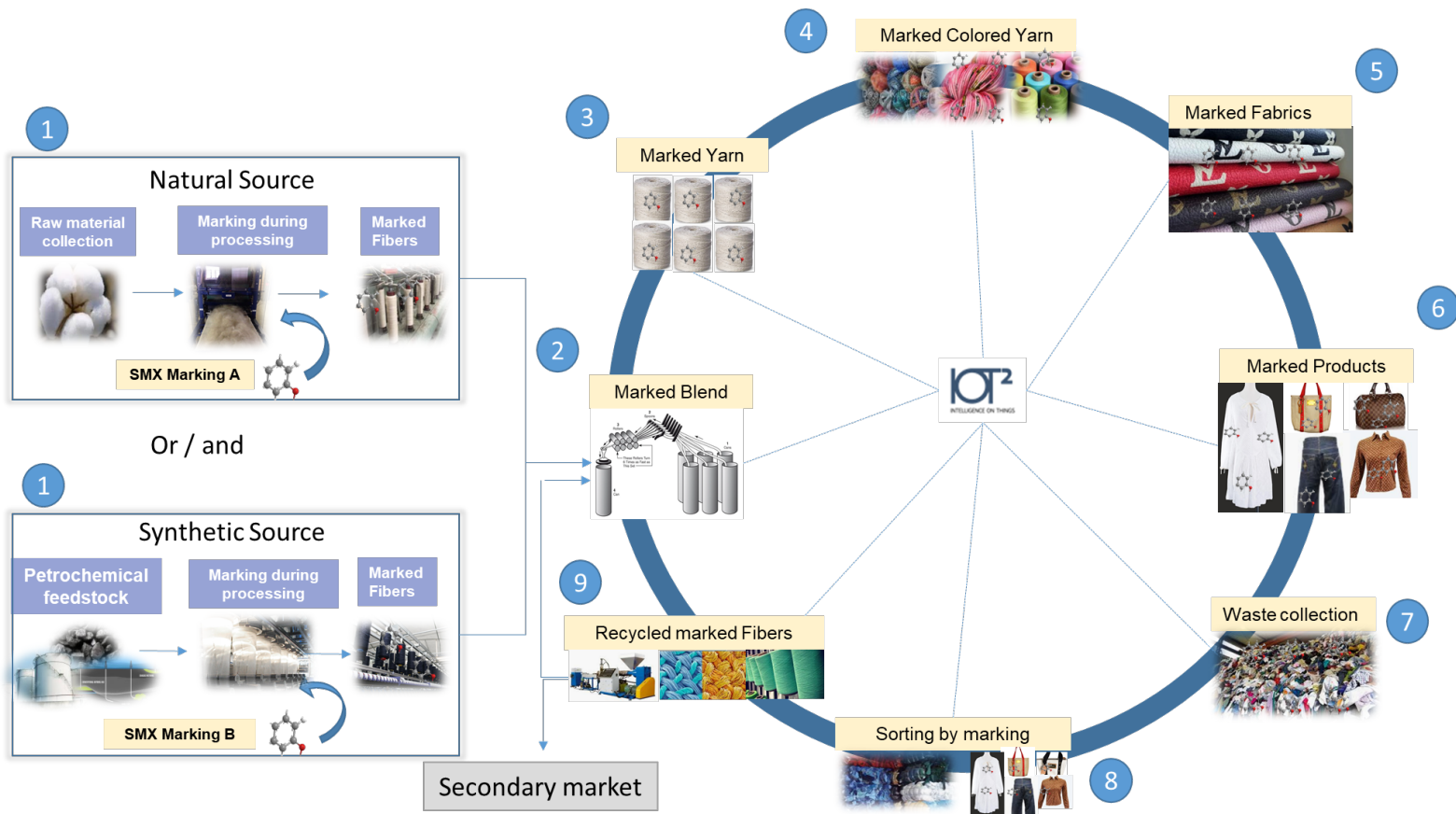


**SMX officially opened a Fashion Sustainability Competence Centre to provide fashion brands more transparent, cost-effective and efficient access to SMX's 'plug & play' proprietary technology that has been designed for use within the fast, high volume and low-price fashion industry.**

- SMX's innovative technology and digital twin blockchain platform 3.0 that can enable participating fashion brands to recycle their own merchandise (clothes, shoes, accessories including sunglasses) back into higher quality materials and merchandise, is ready for commercial scale operations. SMX can work with fashion brands by building and adapting the technology to their production facilities.
- SMX Blockchain provides a more transparent, cost efficient and tangible platform for upstream and downstream value chain players to co-ordinate, share data and evolve production methods from a linear model (take-make-dispose) to a circular model (take- reuse/make – recycle).
- SMX's Equilibrium Circular Economy business model can reduce the amount of raw materials required and amount of waste whilst meeting the financial goals and ESG demands of the market and consumers, which is vital to future-proof the fashion industry.
- It is envisioned that the SMX technology can allow US, UK and EU companies to comply with new regulations on carbon emission and sustainability including the EU Green Deal.
- SMX's technology is applicable across a range of materials including wool, organic cotton, organic silk, leather, EVA, TPU, ABS, PET, Vegan Leather, Polyester and its applications encompasses shoes, trainers, leather goods, clothes, sunglasses and accessories.

# The Fashion Equilibrium Circular Economy

- Enabling Conscious Fashion
- Enabling Circular Economy Production Values





## Electronics



wbcsd



Governmental  
Cyber Authorities  
& Agencies



wbcscd

The World Business Council for Sustainable Development (WBCSD) and SMX launched a pilot project for Circular Electronic Manufacturing

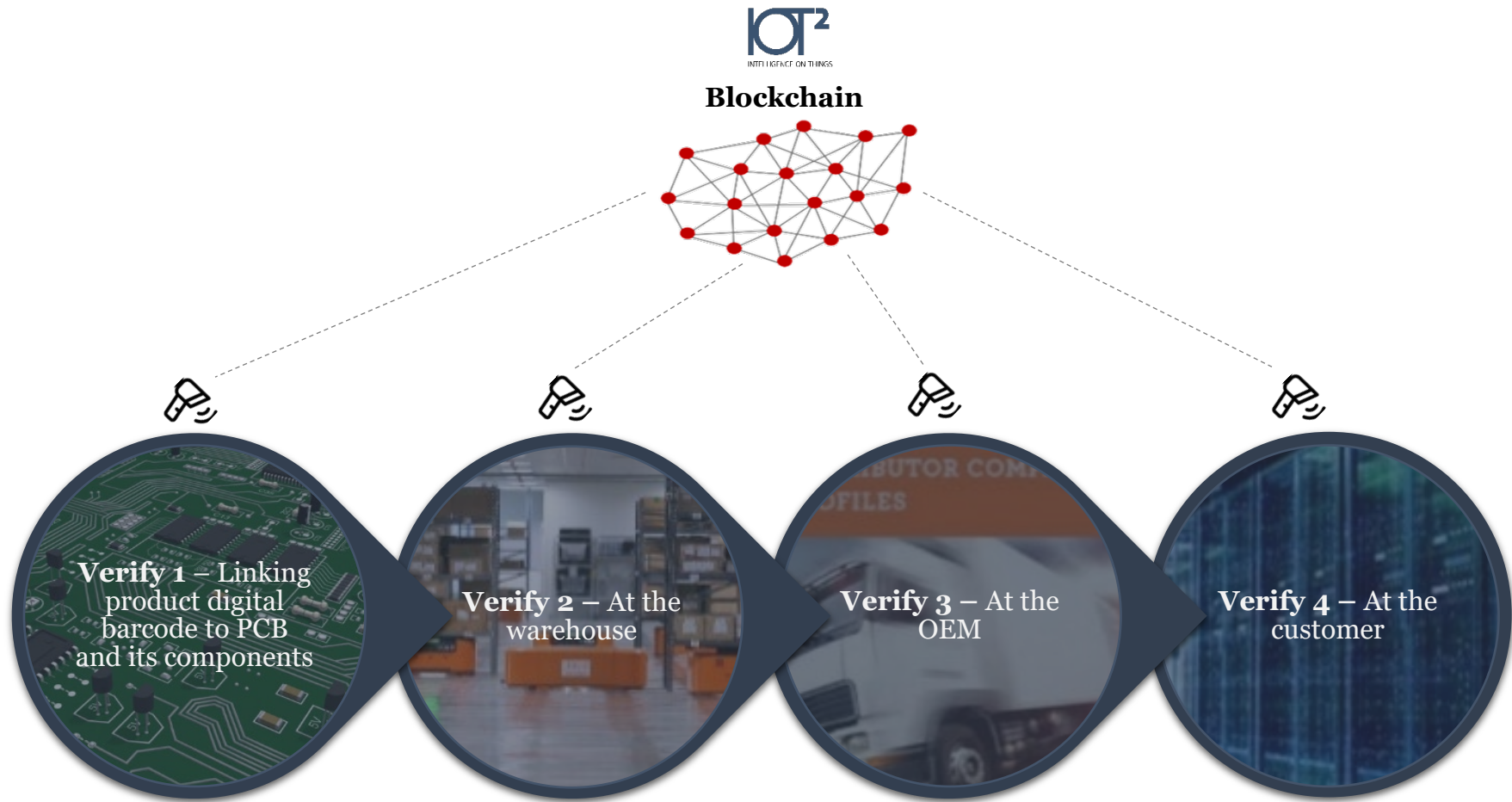
## Overview

- Invited by the WBCSD, SMX joined the first private sector alliance of top electronic brands and its founding partners of the Circular Electronics Partnership (CEP).
- The members of the CEP include Dell Technologies, Microsoft, Cisco, Google, Vodafone, Lanxess, Sims Lifecycle Services, Glencore, KPMG International and Closing the Loop, among others.
- The Circular Electronic Manufacturing pilot project can play a tangible and practical role in CEP's roadmap for the electronic brands and manufacturers to transition more successfully to a circular economy.

The primary objective of the pilot project is to demonstrate how SMX's technology can mark, track & trace EEE (Electronic & Electrical Equipment) along the supply chain, can enable circularity over materials and reduce the use of raw materials.

## Anticipated Benefits

- ✓ Transforming from linear to circular economy
- ✓ Reclaim waste by brand / application
- ✓ Maximizing branded materials' specs by moving to multiply cycle use of material
- ✓ Claiming additional carbon credit and preparing for plastic credit
- ✓ Compliance with future ESG regulations
- ✓ To be able to detect in real time and in a non-intrusive manner if any substitution or loss has occurred.



# SMX Adoption, Scale, Commercialisation



# Sumitomo Non-Ferrous Metals Ethical Sourcing, Sustainability and Recycling



ビジネス1 [この記事をビューアーで読む](#)

## 住商、非鉄金属の生産履歴追跡ブロックチェーンの技術活用

〔資料会員専用〕

[保存](#) [共有](#) [印刷](#) [翻訳](#) [Twitter](#) [Facebook](#) [その他](#)

住友商事はニッケルなどの非鉄金属がサプライチェーン（供給網）上でどう流れたかを追跡できるサービスに乗り出す。分子レベルの特殊な目印を使い、鉱石から製品になるまでの過程を追う。追跡データはブロックチェーン（分散型台帳）技術で管理する。鉱山労働者の人権問題や経済安全保障の観点から原料の調達元や生産過程の情報開示が重視されており、メーカーなどからの需要を見込む。

オーストラリアの新興企業セキュリティーマーズと総代理店契約を結んだ。同社の独自技術を用いて非鉄金属の原料となる鉱石などに、分子を組み合わせた特殊な目印をつけて管理する。

目印は鉱石が製錬などの工程を経て加工されても消えず、追跡できるという。住商はセキュリティーマーズと連携し、サプライチェーンを見える化するサービスを展開し、自動車などの最終製品メーカーを軸に売り込む。

住友商事は、電気自動車（EV）の車載電池に含まれるニッケルやコバルトなどの希少金属（レアメタル）の加工過程の追跡や、二酸化炭素（CO2）排出が少ない製法でつくられた「グリーンアルミニウム」を使った製品の信用性を担保するサービスなどを展開する計画だ。また銅製品のスクラップ使用率の算定といった用途も想定する。2023年にも提供を始める考えだ。

セキュリティーマーズとの契約では、非鉄金属分野を対象に同社の技術を住友商事が数年にわたって世界で独占的に活用できる。生産履歴の管理を重視する欧州企業などを中心にサービスを売り込んでいく考えで、契約期間中に計3500万ドル（約48億円）の売り上げを目指す。

世界では欧州などを中心に製品のトレーサビリティ（生産履歴の追跡）を重視する動きが強まっている。だがこれまでは非鉄金属のように製品化される段階で形状が変わる材料の履歴を管理することは難しかった。

住商は今後、非鉄金属以外の分野でもセキュリティーマーズとの協業を検討していく。

[保存](#) [共有](#) [印刷](#) [翻訳](#) [Twitter](#) [Facebook](#) [その他](#)



SMX, Sumitomo sign exclusive deal including \$35m sales target for non-ferrous metals market products. Image: Getty

<https://stockhead.com.au/tech/smx-sumitomo-sign-exclusive-deal-including-35m-sales-target-for-non-ferrous-metals-market-products/>

<https://www.nikkei.com/paper/article/?b=20221209&ng=DGKKZO66677220Y2A201C2TB1000>



# Continental – Invisible Markers in Tires Ensure Greater Transparency in the Natural Rubber Supply Chain



Press Release December 07, 2022

## Invisible Markers in Tires Ensure Greater Transparency in the Natural Rubber Supply Chain

- Marker substance allows geographical origin of raw materials to be verified
- Field testing successfully completed - marker substance can be verified beyond doubt throughout the production process
- In the long term, Continental plans to use the marker substance on a large scale in rubber products

Hanover, Germany, December 7, 2022: Continental and Security Matters (SiG), an innovative tech platform specializing in digital tracking using verifiable blockchain-based protocols, has successfully completed the first time in verifying beyond doubt a marker substance for natural rubber in the tire and thus throughout the entire production process. The dedicated marker technology, which both companies optimized for use in natural rubber, is designed to create greater transparency along the entire value chain of tires and technical rubber products from Continental. Protected with special security features, the use of the marker substance enables the invisible marking of natural rubber with information on its geographical origin. This means, for example, that responsibly sourced natural rubber and its origin can be verified at every stage of the supply chain all the way to the customer. In doing so, Continental is further strengthening its pioneering role in its commitment to greater transparency along its supply chain. By 2030 at the latest, all materials that Continental uses in its tire production will originate from responsible sources.



Continental and SiG have successfully completed the first time in verifying beyond doubt a marker substance for natural rubber in the tire and thus throughout the entire production process.

"We see huge potential in marker technology in the future. It will help us to ensure that the natural rubber we use in our tires is grown and sourced entirely responsibly," says Claus Reppert, Head of Sustainability at Continental Tyres. "Over the long term, we believe that marker technology could help to make the sometimes complex processes in our supply chains more transparent and verifiable. With Security Matters, we have an innovative partner for the development and testing of marker technology by our side."



Claus Reppert, Head of Sustainability at Continental Tyres

"Together with Continental, SiG will use marker reader and digital technology to further improve the transparency of the natural rubber supply chain and ensure sustainability and integrity," says Maggie Roth, CEO of SiG.

In the successfully completed field test, the marker substance underwent and passed a real test of resilience. The substance was exposed to repeatedly given stress during handling and introduced not only the invisible markers, but also in the production of natural rubber outside the manufacturing process test.

In the manufactured tire, the data was retrieved using special purpose-built software and a reader and correctly interpreted. The appearance and performance of a device containing the invisible marker remained unchanged.

Smallholders taught how to use the marker substance

For the field test, natural rubber grown as part of a joint project run by Continental and the German development and agency, Südostdeutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) in the rubber plantation of West Kalimantan was used and provided with the markers. The project focuses on education and cooperation with the aim to expanding sustainable supply chains for natural rubber. Local smallholders were taught how the marker substance works and in what concentration they need to be added to the latex.



Local smallholders were taught how to use the marker substance and in what concentration they need to be added to the latex.

### Contact



Henry Schmeling  
Head of External Communications  
Continental Tyres  
+49 511 520 21010  
[henry.schmeling@continental.com](mailto:henry.schmeling@continental.com)



Laura Altmann  
Communications Manager  
Continental Tyres  
+49 511 520 22614  
[laura.altmann@continental.com](mailto:laura.altmann@continental.com)

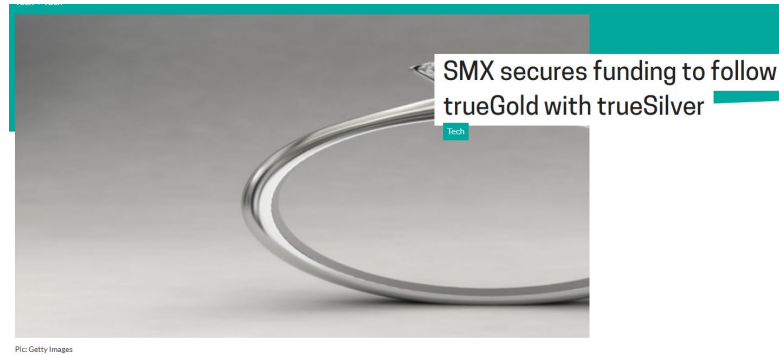


The tech will create greater transparency along the entire value chain of tyres and technical rubber products from Continental. Pic: via Getty Images.

<https://stockhead.com.au/tech/smx-continental-break-through-deal-ensures-ethical-sourcing-and-sustainability-in-rubber-tyre-supply-chain/>

<https://www.theaustralian.com.au/business/stockhead/smx-continental-deal-ensures-ethical-sourcing-sustainability-in-rubber-tyre-supply-chain/news-story/64594307812c8747632679a1f805b197->

<https://www.continental.com/en/press/press-releases/20221207-security-matters-smx/>



<https://stockhead.com.au/tech/smx-secures-funding-to-follow-truegold-with-truesilver/> -



**SMX Team**

## The SMX team combines deep R&D and commercialization expertise



**Haggai Alon**

Founder, Executive Director & CEO

Founder of Security Matters. 20+ years of experience in commercializing technology.



**Zeren Browne**

Executive VP, Chief Strategy Officer

20+ years experience in global brand management and commercial business activities for luxury & lifestyle conglomerates such as LVMH & Estée Lauder Companies.



**Limor Lotker, CPA**

Chief Financial Officer

A qualified Israel chartered accountant with over 20 years' experience, and previously held a financial leadership role in a company with global operations in the electronic industry.



**Gal Shmueli**

Chief Technology Officer

26+ years of experience in the fields of technology, software engineering, cyber innovation and system engineering. Retired as a colonel, Head of cyber unit in the technological branch of the IDF.

**+ 20**

Additional Employees

**4**

with Natural Science  
Ph.D.'s

**8**

with Engineering  
Degrees



**Haggai Alon**

Founder, Executive Director & CEO

Founder of Security Matters. 20+ years of experience in commercializing technology.



**Ophir Sternberg**

Chairman

Began his career assembling, acquiring and developing properties in emerging neighborhoods NYC, which established his reputation for identifying assets with unrealized potential and combining innovative partnerships with efficient financing structures to realize above average returns.



**Pauline Khoo**

Non-Executive Director

40+ years of financial and managerial experience in financial institutions, law firms and various companies. She currently serves as the Wealth Planning Manager at Mishcon de Reya and was previously the Managing Director of Credit Suisse Trust Limited.



**Zeren Browne**

Executive VP, Chief Strategy Officer

20+ years experience in global brand management and commercial business activities for luxury & lifestyle conglomerates such as LVMH & Estée Lauder Companies.



**Thomas Hawkins**

Non-Executive Director

Thomas Hawkins currently serves on the board of directors of the Alumni Association of the University of Michigan and Jumptuit Inc., a data analytics technology company. Mr. Hawkins also serves on the board of directors of MSP Recovery.



**Roger Meltzer**

Non-Executive Director

Chairman Emeritus of DLA Piper. He is also a member of the firm's Global Board and the US Executive Committee (Co-Chair). Has practiced corporate and securities law for 40+ years.



**Amir Bader**

Non-Executive Director

20+ years of experience in the management of agricultural businesses in Israel and Europe. Currently managing one of Israel's largest dairy farms.



[info@securitymattersltd.com](mailto:info@securitymattersltd.com)