NGIS

IMPACT THROUGH GEOSPATIAL

2024 IMPACT REPORT

Contents

Letter from the CEO
PAUL FARRELL

"Our commitment to making a positive impact will continue to be the heart of all that we do, guiding our decisions and actions."

Welcome to the 2024 NGIS Impact Report. This year's report reflects our continued and steadfast commitment to delivering impact and driving meaningful change in all that we do. I am incredibly proud of our team's dedication and innovation mindset, the strength of our strategic partnerships, our valued stakeholders and the collective impact we've made together. We face a world of challenges, some longstanding and others emerging suddenly. A truly sustainable future demands collective action, shared accountability, and an acknowledgment that its impacts are not borne equally by all.

At NGIS, our commitment to sustainability, innovation, and social responsibility continues to drive us forward. This year's impact report highlights the meaningful change we have driven across key areas. At our core, we harness the power of maps and data to shape a better future.

We recognise that businesses play a crucial role in building more inclusive societies. Our social impact initiatives prioritise diversity and inclusion, particularly in supporting First Nations people. We are especially proud of the achievements of our sister company, Winyama, whose work in bridging the digital divide for traditional landowners is truly inspiring. This year we also joined forces with Australian Spatial Analytics (ASA) creating employment opportunities for neurodiverse professionals to thrive at NGIS.

A major milestone in 2024 was the opening of our office in the United States. With a well established presence in APAC and EMEA, this expansion strengthens our ability to create impact across the globe. Our long-term vision is to be a global player in delivering impact through geospatial and this further propels NGIS towards this.

As we reflect on our progress, we look ahead with determination and a sense of responsibility. We are energised by the opportunities before us and remain committed to building a more sustainable, equitable future.

I extend my deepest gratitude to our partners and customers, and stakeholders for your trust and belief in creating positive impact. And to the entire NGIS team, thank you for your dedication to our mission. I am truly inspired by the drive and passion you demonstrate daily and grateful that I've had the opportunity to spend my entire career in this great business working alongside such a talented team.

Here's to another year of impact, innovation, and progress.

Paul Farrell
CEO, NGIS

Letter from the Executive Director

NATHAN EATON

I am tremendously proud of the impact and achievements of our people and partners over the past 12 months. The passion and dedication shown in our stories of impact showcase the true mission of our business and the ability for our wonderful people to use their skills to enact positive change.

During 2024 the number of satellites monitoring the earth passed the 10,000 mark, representing a 5x increase since 2019. Leveraging this enormous repository of data about our changing environment continues to provide the impetus for many of our high impact initiatives from eliminating global deforestation to protecting giant kelp forests in the southeastern waters of Australia. The use of geospatial technology and satellite based data continues to underpin the key trends that we witnessed through 2024.

EVOLVING REGULATIONS FOR DISCLOSURES

We are at the beginning of the regulation curve for disclosure and reporting on supply chains, extending beyond standard certification approaches that were previously accepted. In addition to the EU Deforestation Regulation (EUDR) the additional policies and regulations, that will come into effect over the next 5 years will deliver a step wise change in the level of transparency and traceability required by organisations. The Corporate Sustainability Reporting Directive (CSRD), Carbon Border Adjustment Mechanism (CBAM) and Corporate Sustainability Due Diligence Directive (CSDDD) will be among the significant changes that will all require geospatial technology to map and analyse supply chains for ESG compliance.

INCREASING DEMAND FOR SUSTAINABLE PRODUCTS

Whilst the regulation curve for sustainability driven disclosures is driving wide spread transformation across industries, the continued demand for sustainable products has proven the long term need for a responsible marketplace. The increased awareness of social and environmental factors are enabling consumers to make more educated decisions complemented by the increased corporate transparency driven by rapidly evolving disclosures. In 2024 the estimated Sustainable Materials Market Size was over $300bn USD, projected to reach over $1000bn USD within the next ten years.

Letter from the Executive Director (cont)

NATHAN EATON

FUTURE CLIMATE RISK

The rapid evolution of disclosures in 2024 extended to future climate risk with increased pressures at every level of supply chains to improve climate related reporting. The urgency for climate risk mitigation and adaptation did not diminish across 2024, nor did the focus on physical risks. With new regulations and policies relating to decarbonisation and emission reduction the increased investment into areas of transition risk management was a significant trend in 2024. Underpinning this transition, risk management is the use of geospatial data for future climate scenario modelling against assets and the physical environment.

AI DRIVEN SUSTAINABILITY

It would also be no surprise that through 2024 the use of AI for data driven sustainability was a leading trend. Advances extended from the increased scale and sophistication of data analysis and automated interpretation through

to the ability for Generative AI to greatly reduce barriers to the use of future climate models through natural language querying. The nexus of having more data about our environment than ever before coupled with the need to turn this data into actionable insights for disclosure based regulations is creating the opportunity for AI to play a pivotal role in addressing our biggest challenges as a global community.

As you will see from reading through our stories in this report, our partners play such a pivotal role in enabling our team to deliver solutions that create real world impact. To our brilliant partners and the wonderful passionate people at NGIS I sincerely thank you.

Our Impact at a Glance

IMPACT THROUGH TECHNOLOGY

As innovators, we harness cutting-edge geospatial technology to deliver intelligent solutions that empower individuals, businesses, and communities to act faster and smarter every day.

IMPACT THROUGH SUSTAINABILITY

We exist to leverage geospatial to address some of the world's most complex climate and sustainability challenges through knowledge and enlightenment.

IMPACT THROUGH COLLABORATION

Our role as industry leaders is underscored by our strategic partnerships and a team of geospatial experts. Collaboration enables us to evolve, adapt and enact positive change on a global scale.

About Us

NGIS is a leader in geospatial; we seek to better the world by harnessing the potential of maps and data. We provide knowledge and insights, shaping our understanding as individuals and empowering organisations to elevate their offerings. Through our commitment, we strive to contribute to a better world today and in the future.

We are results and client-focused. Our team is talented and courageous; as an independently owned entity, we chart our own path, collaborating with top technology partners and possessing diverse capabilities in geospatial solutions. With extensive experience spanning various sectors, we profoundly understand the unique needs of those we interact with. These distinctive traits define our identity.
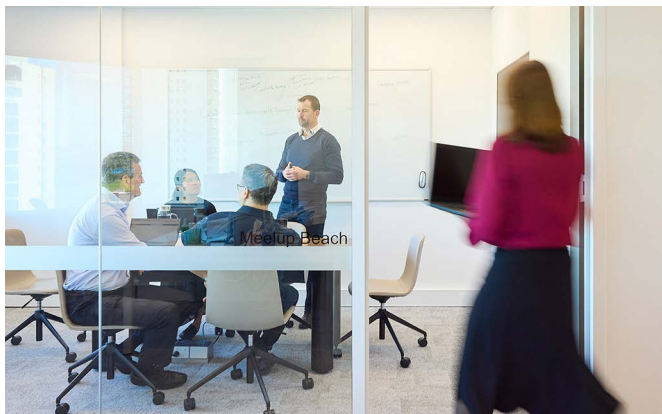
OUR MISSION

At NGIS, our mission is to deliver impactful solutions each day. We aim to empower organisations and address global challenges through cutting-edge geospatial solutions. Utilising leading technology products and our dedicated team of passionate and professional experts, we remain committed to making a positive difference for our clients and communities worldwide.

OUR PROMISE

Our commitment encapsulates our brand promise at NGIS: To make a positive impact in everything that we do. This promise drives us to empower organisations and address global challenges through innovative geospatial solutions.

OUR VALUES

At NGIS, our values are not just words; they are the embodiment of our daily behaviours.

PASSIONATE

We deeply care about making a lasting impact for our clients and our business. Our passion drives us to seek innovative solutions and exceed expectations continually.

UNIFIED

We value and engage with each other as we would with a client. Our unity fosters collaboration, diversity, and a supportive environment where everyone's contribution is recognised and celebrated.

PROFESSIONAL

We communicate openly, transparently, and professionally in the right way at the right time. Our commitment to professionalism ensures a culture of trust, integrity, and accountability.

Impact for our People

A CULTURE OF INCLUSION

When differences are valued and diversity of thought is celebrated, a culture of innovation, problem-solving and adaptability thrives. That's why we care deeply about creating an inclusive environment where everyone - regardless of their age, gender or background, feels a sense of belonging and is empowered to contribute their unique perspectives and skills. At NGIS, our people reflect our culture; engaged and energised, with a shared focus on improving the world, not just for today, but tomorrow too.

"...we look ahead with determination and a sense of responsibility."

— Paul Farrell, CEO NGIS.

6.5%

of our employees identify as First Nations

42% of our employees are female

(60% ABOVE INDUSTRY AVERAGE)

1000+ participants

involved in Indigenous Mapping Workshop and internship training

42%

younger than age 35

(INDUSTRY AVERAGE – 20%)

Impact Throughout the Years

1993

NGIS AUSTRALIA
Established as a Geospatial company.

1998

HONG KONG SUSTAINABILITY MONITORING PROJECT
NGIS awarded a 3-year contract to build a sustainability development system and computer-assisted sustainability evaluation tool (CASET) for the Hong Kong Government.

2001

MEKONG RIVER COMMISSION (MRC)
NGIS collaborated with the MRC Secretariat to assess traditional and innovative techniques, enhancing flood hazard and risk map delivery in the Mekong Basin. NGIS provided technical expertise, evaluated data sets, and improved the integration of flood mapping and forecasting systems, ensuring effective communication for timely action in flood-prone areas.

2004 - 2005

TSUNAMI RESPONSE EFFORT IN BANDA ACEH
NGIS initiated a project to support recovery operations in the tsunami-affected regions of Aceh and Nias. By integrating disparate sources of spatial data into an intuitive mapping interface, the rebuild of critical infrastructure was able to be more effectively planned, managed and monitored.

2006

NGIS LAUNCHES INDJI WATCH
Indji Watch is a cloud-based natural disaster management and risk mitigation tool for utilities, designed to give users more significant insights into environmental threats and allow them to be proactive in making better-informed decisions on hazards that threaten their utility operations.
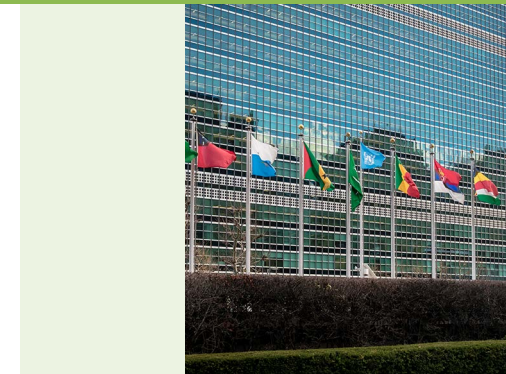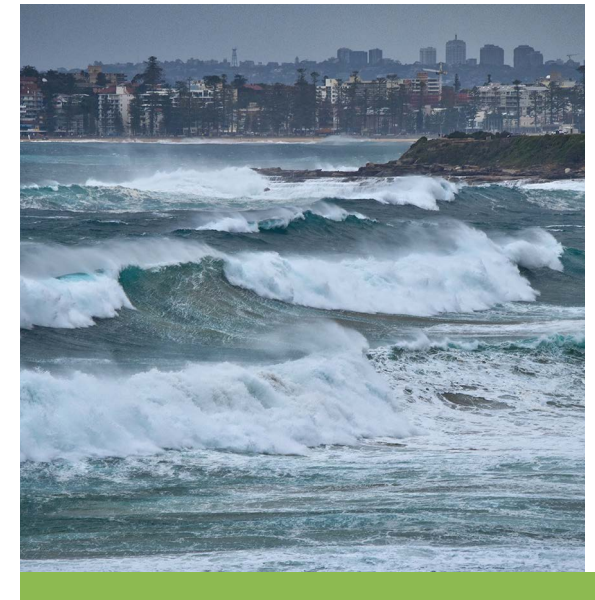
Impact Throughout the Years

2008 **WORK WITH AFRICAN GEOLOGISTS**
NGIS delivered intuitional capacity building for officials from over 10 African countries, focusing on the effective governance of mining through geoscience data.

2014 **COASTAL RISK AUSTRALIA**
In partnership with FrontierSI, NGIS developed Coastal Risk Australia to illustrate the severity of rising seas based on the latest scientific modelling via an interactive map. Accessible to the public, the map highlighted the potential impacts of climate change and rising sea levels by 2100. When released the tool attracted national attention with more than 1.5 million views in one day.

2015 **CRISIS MAPS FOR CYCLONE PAM**
Cyclone Pam was one of the worst natural disasters to impact the Pacific region. NGIS urgently responded with our partners Google, CRCSI and DigitalGlobe to create a crisis map, providing the first post-cyclone imagery and population data for aid agencies to target and manage affected communities.

2016 **UNITED NATIONS LIGHTHOUSE AWARD**
Recognised by the UN at the Climate Change conference in Paris, NGIS received the Lighthouse Award for our 'Mapping Exposure to Sea Level Rise' in the Pacific Islands project, a leading initiative dealing with climate change.
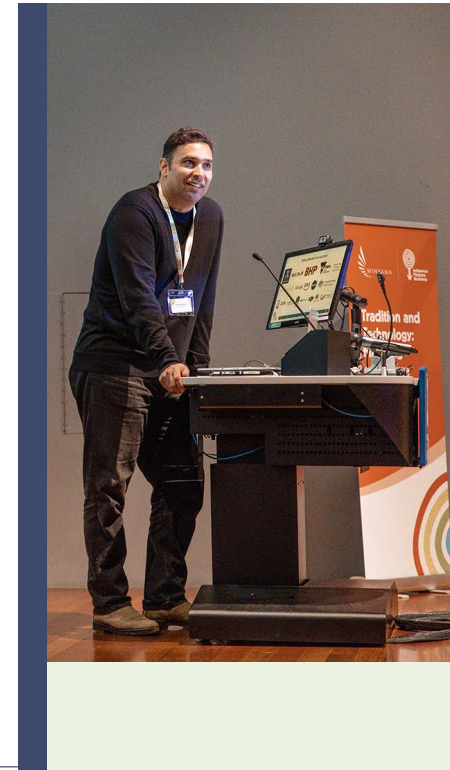
Impact Throughout the Years

2018

WINYAMA PARTNERSHIP WITH NGIS FORMED
Indigenous owned and operated, Winyama utilises technology in mapping, data management and analysis that enables clients to manage their land and assets in response to environmental, cultural, economic and resource demands. In addition, through culturally appropriate teaching, Winyama encourages the combination of tradition and technology to bridge the gap for Indigenous participation in the digital economy.

2019

INDIGENOUS MAPPING WORKSHOP (IMW)
Winyama hosts Australia's inaugural IMW event. The IMW supports the optimal use of geospatial technologies, empowering Indigenous communities to have control over the collection, analysis, and visualisation of community-generated spatial data. It educates Indigenous-led organisations on employing digital tools to collect, host, and share maps, supporting diverse community objectives.

2020

GEO-GEE PROGRAM
In collaboration with Google and the Group on Earth Observations, NGIS initiated the GEO-GEE Program, supporting developing GEO member countries with a $4 million USD program to address sustainable development challenges through 32 selected projects across 22 countries, utilising freely available Earth Observation data.

2021

SUSTAINABILITY PARTNER OF THE YEAR
One of five worldwide sustainability partners, NGIS was recognised by Google as the leading data and application provider helping global businesses and governments accelerate sustainability programs, inform decisions on future growth, and better understand the impacts of climate change.

Impact Throughout the Years

2022 **LAUNCH OF TRACEMARK**
TraceMark™, an NGIS solution, is purpose-built to assist businesses in delivering traceability and transparency in global supply chains. With a data-driven approach to sustainably sourcing raw materials, TraceMark™ enables organisations to monitor and map exactly where each supplier is operating and quantify how this impacts sustainability progress.

2023 **MATERIALS IMPACT EXPLORER RELEASED**
Developed through a collaboration between WWF and Google, the Materials Impact Explorer empowers fashion brands to make sustainable sourcing decisions. Textile Exchange acquired the Materials Impact Explorer tool at the end of 2021, and in 2023 NGIS donated its expertise to further enhance the tool's technical functionality.

2024 **UNITED NATIONS SUSTAINABLE COFFEE SOLUTION LAUNCHED**
Building foundational capabilities to future-proof African coffee production. The solution addresses regulatory compliance and extends into sustainable agricultural practices, value-added services and climate finance solutions.

2025 **RSPO PRISMA LAUNCH**
Aimed at enhancing trade and compliance with current and emerging global regulations, prisma (Palm Resource Information and Sustainability Management) is RSPO's advanced certification, trade, and traceability system.

Our Approach to Impact

We believe in the transformative potential of geospatial technology. The insights, data and solutions NGIS delivers shape us as people, help organisations enhance their offerings, and can impact the world for the better - not just for today, but for tomorrow too.

By leveraging the latest **geospatial technology, leading partners,** and **our own talented and courageous people**, we aim to deliver impactful solutions each and every day.
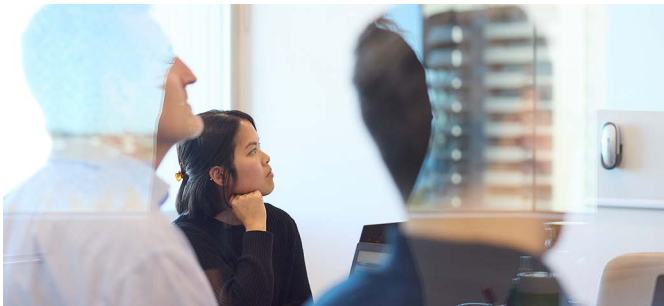
PEOPLE

Our talented and courageous people are at the heart of everything we do. They are nurtured in an environment where innovation, continuous learning and bold decision-making is celebrated. At the core of this environment lies opportunity. The opportunity to work on high-impact projects, to collaborate with like-minded people, and the opportunity to invest their time in areas they are passionate about. The work is meaningful and makes a real difference; that's why we attract the best.

PARTNERS

We recognise and celebrate the collaborative nature of our industry. Our client relationships, industry participation, and strategic partnerships are integral to our success. As a niche geospatial company, we have created strategic partnerships with leading global companies that provide the data, technology, and engagement to enable our team to deliver impactful solutions. Through these partnerships, we are able to scale and evolve the solutions we deliver.

GEOSPATIAL

Innovation is ingrained in our DNA. We're pioneers, adopting cutting edge geospatial technology that redefines industry standards. We believe that leveraging the use of geospatial is key in addressing many of the world's most significant challenges. With capabilities in Enterprise GIS, Software Engineering, Cloud Engineering and Earth Observations, we apply our geospatial expertise to deliver impact.
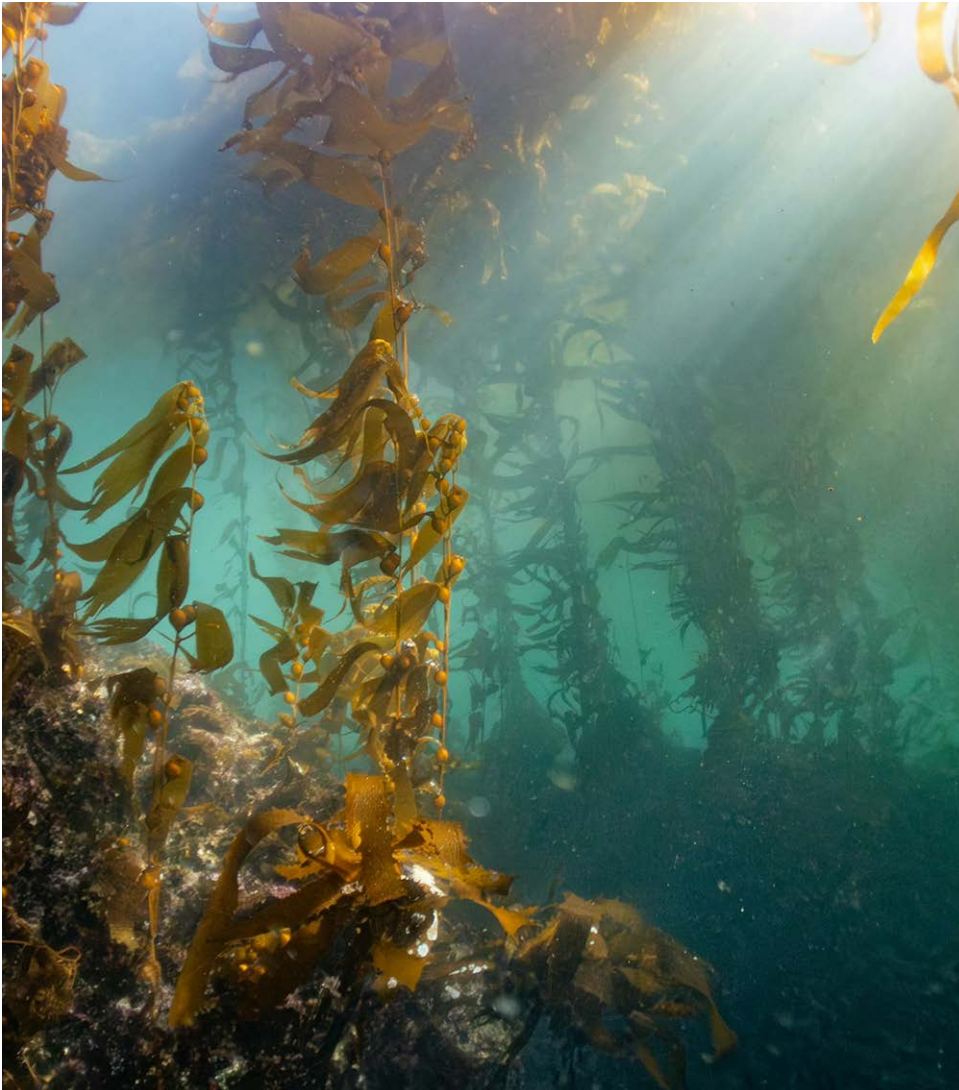
Pioneering impactful
geospatial solutions
for three decades

Stories of Impact

Mob Leading Geospatial Innovation: Empowering Communities, Mapping Impact

Australia's tech industry is growing rapidly, yet Indigenous representation remains critically low. Despite making up nearly 3.8% of the population (source 2021 Census), Indigenous Australians account for approximately 0.17% of the ICT workforce. This gap isn't just a missed economic opportunity - it's a barrier to Indigenous participation and leadership in the digital age.

Indigenous communities have long been innovators in land stewardship, story telling and knowledge sharing. But without a strong presence in the geospatial and technology sectors, First Nations communities are losing control over how their land, culture and data is represented. Winyama (meaning 'Sea Eagle' in the Ngarluma traditional language) is one of Australia's only Indigenous geospatial consultancies. With over 8 Mobs represented, and 40+ years of combined experience and knowledge, Winyama specialise in technology and data solutions for First Nations organisations and communities with the aim of building geospatial capability and bridging this digital divide.

Winyama operates independently as an Indigenous organisation while maintaining a strong partnership with NGIS, a significant shareholder, to support shared goals of geospatial impact and innovation. Through training,

cultural mapping and data sovereignty initiatives, Winyama is empowering Indigenous Australians with the expertise to make informed decisions about Country, safeguard their technological futures, and transform their cultural knowledge into powerful mapping solutions.

INDIGENOUS INCLUSION WITHIN THE GEOSPATIAL WORKFORCE

Winyama's Indigenous Digital Skills Internship program offers paid geospatial internships designed to equip Mob with the skills needed to succeed in the tech industry.

Since its inception in 2018, Winyama has proudly supported over seven Indigenous individuals in their journey within the technology sector, with three advancing to become proficient geospatial analysts. This reflects seven years of cumulative training and nearly 0.5% of Indigenous representation within Australia's tech industry. While this percentage may seem small, it underscores the program's critical importance and its profound impact.

This initiative not only addresses the wider opportunity gap but also fosters lasting change for individuals, empowering them to forge meaningful careers in the digital economy.
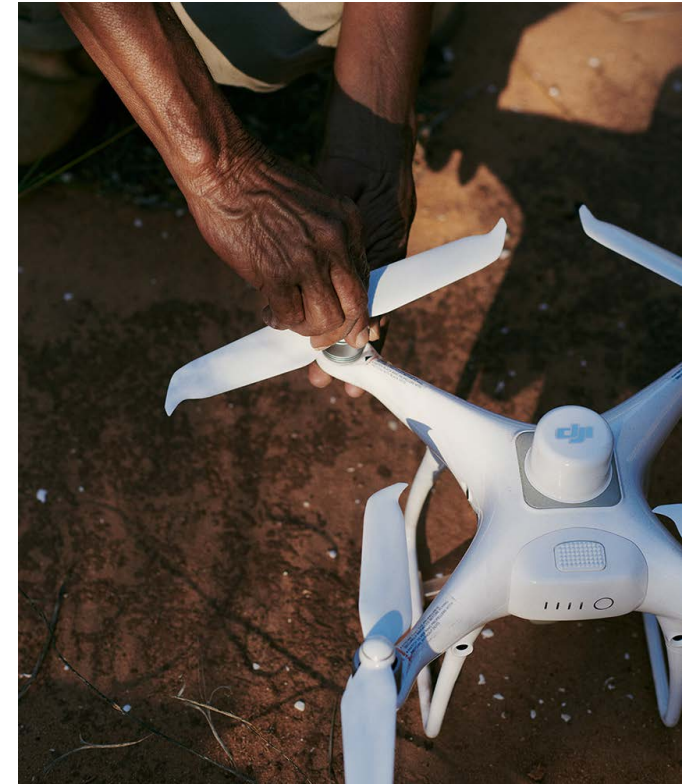
"Despite making up nearly 3.8% of the population (source 2021 Census), Indigenous Australians account for approximately 0.17% of the ICT workforce."

TRADITION AND TECHNOLOGY: PRESERVING CULTURE

Indigenous landscapes are alive—woven with stories, practices, relationships, memories, and rituals that breathe meaning into place.

Cultural mapping goes beyond archaeological surveys, capturing the intangible elements of culture: the knowledge of natural medicines and their locations, traditional place names, seasonal travel patterns, and the stories that tie people to Country. These insights are vital to preserving cultural identity and showcasing the profound connections Mob has with the land.

Increasingly, cultural mapping serves as a bridge—helping Indigenous communities communicate the significance of place to non-Indigenous stakeholders.

Winyama leads the way, pioneering a best-practice methodology developed in partnership with Indigenous communities to create cultural maps that honor and protect these connections for future generations.

BUILDING CAPABILITY WITHIN COMMUNITIES WITH RIGHT WAY DATA MANAGEMENT

Aboriginal and Torres Strait Islander knowledge has long enriched modern Australia, fueling economic growth and guiding environmental solutions. Today, Indigenous Data

Sovereignty (IDS) carries this legacy into the digital age, empowering communities to safeguard and steward their knowledge for generations to come.

Without control over their data, Indigenous communities face a critical threat: the loss of ownership over their stories and the erosion of their sovereignty. This isn't just a technical challenge—it's a cultural crisis.

In an era of rapid technological change, building Indigenous capability in data management is more urgent than ever. Winyama stands at the forefront of this movement. Partnering with communities to develop digital infrastructures rooted in cultural protocols, Winyama upholds traditional authority, protects cultural knowledge with modern solutions, strengthens resilience, drives meaningful impact, and lays the foundation for a thriving future where Indigenous voices lead in the digital realm.

CAPABILITY RECOGNITION OF IMPACT

In 2023, Winyama was named Telstra Business of the Year and Indigenous Excellence winner; an award that celebrates the achievements of Australian businesses across various industries. By doing so, it recognises businesses that have demonstrated excellence, innovation and a strong commitment to their communities, economy and environment.

The following year, Winyama was awarded the highest honour in Australia's geospatial industry, the J.K. Barrie Award for Highest Achievement, recognising their unwavering commitment to advancing Indigenous achievement in the geospatial sector.

These prestigious and significant award wins underscore Winyama's leadership in empowering Indigenous communities through innovative geospatial solutions.
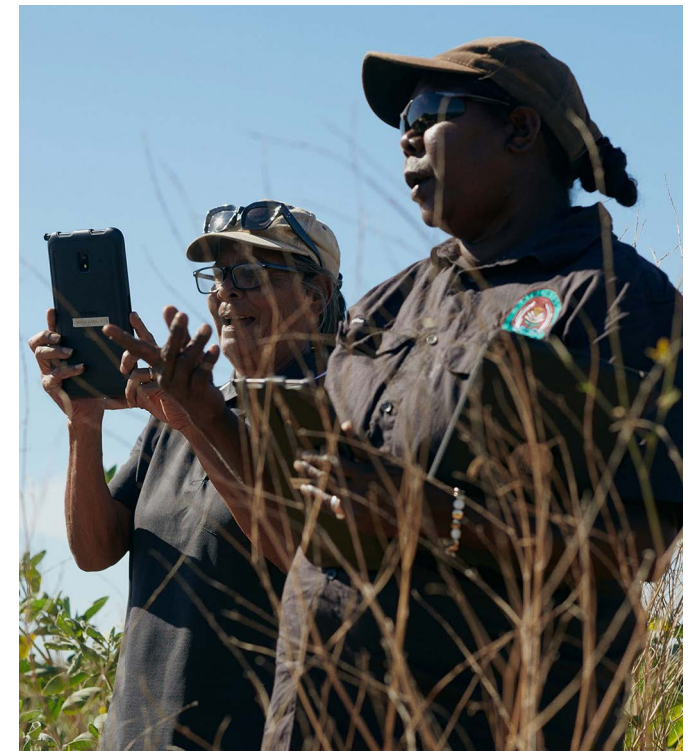
Empowering Indigenous Communities with Geospatial

Winyama's Indigenous Mapping Workshop (IMW) program redefines digital skills training with a holistic, culturally informed approach tailored to Indigenous communities and organisations. By blending technical proficiency with a focus on personal wellbeing, IMW fosters sustainable growth and meaningful engagement for Mob in the digital realm.

Winyama's commitment to continuous improvement shaped this year's National Indigenous Mapping Workshop (IMW) into its most dynamic and inclusive program yet. Responding to feedback, the event expanded to five days and grew from 8 streams to an impressive 40 tailored courses, creating a more personalised learning experience for an increasingly diverse community of participants.

MAPPING MILESTONES: NATIONAL IMW 2024 HOSTED BY WINYAMA

In September 2024, Winyama hosted its most impactful National Indigenous Mapping Workshop (IMW) to date in Boorloo (Perth), uniting a vibrant community of Indigenous mappers for an unforgettable five days of learning and collaboration.

With over 40 workshops delivered, participants explored topics ranging from cutting-edge mapping software and thematic mapping concepts to the groundbreaking launch of a Microcredential in First Nations Land Management, developed in partnership with Curtin University.

More than 100 learners celebrated the powerful fusion of Indigenous knowledge and modern mapping technologies, showcasing the transformative potential of geospatial tools in preserving culture and managing Country.

"Investing in communities at the local, national, and global levels is central to who we are at NGIS. It reflects our core belief that geospatial technology should drive positive change, not just for innovation, but for creating a more sustainable and equitable world. Our focus on impact allows us to advance solutions that benefit both people and our environment."

— Paul Farrell, CEO NGIS.

GROWING WITH COMMUNITY

For the first time, thematic workshops were introduced, reflecting community interests with sessions on cultural mapping and special guest-led discussions on place names and language mapping for Mob. This expanded approach also catered to varying skill levels, offering intermediate training opportunities for participants progressing beyond beginner-level skills.

The workshop concluded by seamlessly weaving tradition with technology, immersing participants in two unique experiences. One group explored Curtin University's HIVE, where stunning data visualisations from the Anindilyakwa Land Council showcased Groote Island's photogrammetry projects for cultural heritage preservation. Meanwhile, others visited the John Curtin Art Gallery Carrolup Centre, where Kathleen Toomath (Minang Woman and relative of Winyama's Chief Drone Pilot Grady) shared a moving collection of artwork created by Aboriginal children from the Stolen Generations in the 1940s.

This year's IMW exemplified the power of innovation, community, and storytelling, empowering Mob to connect with their heritage while embracing the future.

"It was the best conference we have been to. It was so well thought through and curated and gave us skills that are directly beneficial to the work we are undertaking. We have come away energised to empower our community through reasserting our connection to our country. Being in the company of other attendees who have an aligned purpose was similarly powerful. We drew strength from being in their presence." **—Rachel Perkins (Keynote Speaker and Learner)**.

SUSTAINING THE MOMENTUM

The National Indigenous Mapping Workshop (IMW) is a cornerstone of Winyama's broader commitment to Indigenous digital empowerment, delivered through the IMW Australia Program and the Indigenous Digital Inclusion Pathway Program, which provides geospatial internships to Indigenous Australians. This year's overwhelmingly positive feedback from learners, staff, and trainers highlights yet another successful milestone for Winyama.

Expanding the IMW requires strategic investment in venue selection, logistics, and cutting-edge technology to create a seamless and transformative experience for First Nations people across Australia. With additional funding, Winyama can elevate programming, attract top industry experts, and enrich the workshop's impact for attendees.

Empowering Mob in the digital space lies at the heart of Winyama's mission. Collaborating with like-minded organisations and generous partners makes this vision possible. Without their support, the Indigenous Mapping Workshop Australia program would not be the transformative force it is today. Winyama is deeply grateful for the shared commitment to making a remarkable and lasting difference and looks forward to continued partnerships in this vital work.

Eliminating Deforestation

According to a report by the Intergovernmental Panel on Climate Change (IPCC) in 2019, deforestation causes 11% of all greenhouse gas emissions. The main driver of deforestation is the expansion of agricultural land.

Of government actions to protect forests and eliminate deforestation in agricultural supply chains, the most impactful global regulation continues to be the EU Deforestation Regulation (EUDR), which was originally intended to begin on January 1 2025. However, in December 2024 the European Union formally accepted the agreement to delay the official implementation of the EU Deforestation Regulation by 12 months.

Importantly, the agreed delay did not diminish the intent and application of the EUDR to reduce greenhouse gas emissions and biodiversity loss associated with expanding agricultural land. The focus on eliminating deforestation through improving transparency and traceability in global supply chains remains.

The law will now become applicable on 30 December 2025 for large companies and 30 June 2026 for small enterprises. The agreed delay addresses the requests from many organisations to provide additional time to effectively implement automated and integrated EUDR systems that address the key articles of EUDR including:

- **Article 9** | Supply Chain Mapping and Information Requirements
- **Article 10** | Risk Assessment
- **Article 11** | Risk Mitigation
- **Article 12** | Due Diligence System and Statements

The effective implementation of the EUDR will be a pivotal milestone for future sustainable sourcing regulations and frameworks. The Food and Agriculture Organisation of the United Nations estimates that 420 million hectares of forest – about 10% of the world's remaining forests, equalling an area larger than the European Union – have been lost worldwide between 1990 and 2020. And, every year the world continues to lose another 10 million hectares of forest.

ENTERPRISE EUDR

EUDR systems require more than just a list of deforestation alerts. EUDR systems require an enterprise approach to traceability that delivers a robust system of record for EUDR workflows, from transaction level integration with purchasing systems through to direct and automated submission of due diligence statements and numerous workflows in between.

One of the key reasons for the delay in EUDR implementation is to allow companies to implement long term, future proofed EUDR systems capable of addressing the scale and extent of global supply chains. NGIS and Google have been working with impacted companies across the range of EUDR including producers, operators and certification bodies to implement enterprise EUDR systems that deliver the required workflows, automation and system of record.

NGIS and Google have focused on evolving the TraceMark™ product to provide an end to end EUDR system that provides the workflows, automation and integration required to effectively implement EUDR for large companies with complex supply chains. Three key lessons from implementing EUDR in partnership with Google include:

The need for a data agnostic architecture: Regulations, frameworks, science and data are constantly evolving. Effective EUDR implementation requires a scalable architecture that is capable of rapidly adopting and operationalising new data and science to address regulation and framework requirements.

The need for an EUDR System of Record: Effective EUDR implementation requires the combination of a scalable and flexible Geospatial Assessment Engine coupled with a comprehensive case management system to effectively address the risk mitigation requirements of EUDR. Whilst some systems will specialise in each of these respective components it is the combination of Geospatial Assessment and Case Management in the same system that is required for EUDR, including the provision of a true system of record for supplier engagement (ie supplier portal) as well as direct integration with the EU portal (including management of due diligence statements).

The need for a future proof system: Leading organisations are implementing a future proof approach to EUDR with an understanding that a flexible and scalable platform approach is best suited to addressing future ESG regulations that require first mile monitoring and reporting capability. The future proof system extends to an architecture and partnership that provides the capabilities required.

BEYOND EUDR

The implementation of the EUDR signals the beginning of the transition from supply chain certification to first mile verification. Additional sustainability driven policies, laws and frameworks are scheduled for implementation across the next 5 years including:

Corporate Sustainability Reporting Directive (CSRD): a transparency driven legislation that requires companies to provide regular reports on the environmental and social impact of their activities.

Carbon Border Adjustment Mechanism (CBAM): a policy tool that will impose a carbon price on specific goods imported into the EU from countries with less strict carbon pricing than the EU to address carbon leakage across global supply chains.

Corporate Sustainability Due Diligence Directive (CSDDD): an EU law that will require certain companies to assess and manage adverse impacts on human rights and the environment in their connected supply chains.

NGIS is partnering with Google to ensure that the TraceMark™ platform provides the tooling to not only address the impending EUDR but to also provide the capability to also address new and evolving regulations and frameworks. At the core of these frameworks is the need to provide supply chain traceability and transparency, a flexible system for risk assessment and a comprehensive system for due diligence. The use of geospatial technology to drive these fundamental capability layers will be key to ensuring that companies are able to accelerate adaptation to changing ESG requirements.
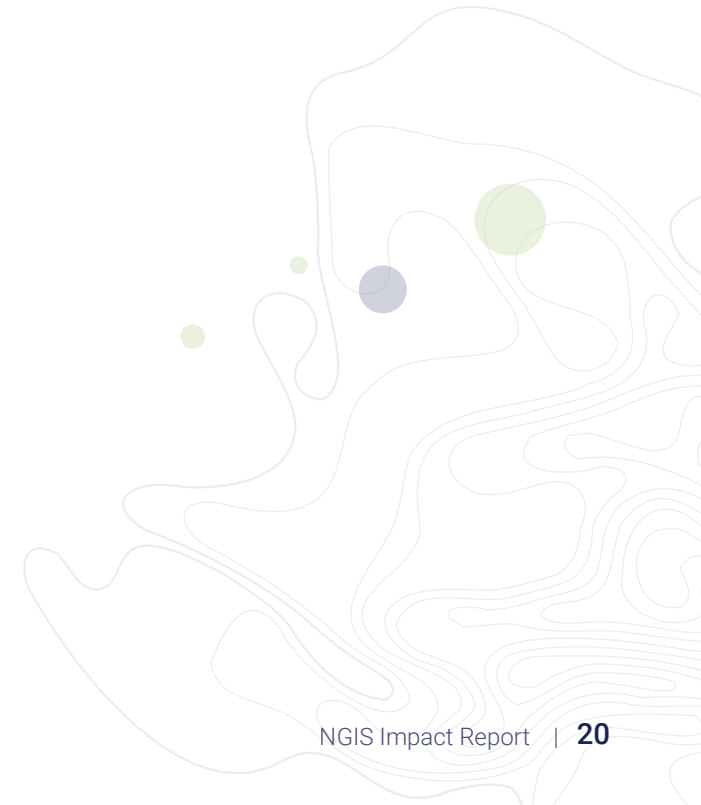
Protecting Giant Kelp Forests

Growing over 35 metres long, and at a rate of half a metre each day, Australia's Giant Kelp (Macrocystis pyrifera) are one of the most productive ecosystems on earth in terms of total carbon generated per square kilometre (Source: The Geography Teachers Association NSW & ACT inc) They provide vertical structure and shade, slowing the water movement to create a sheltered habitat for marine fauna at all levels of the forest canopy.

Of concern, Giant Kelp also has a low tolerance to heat stress. With the warming of our oceans - particularly in the east of Australia where temperatures have risen three times the average global rate, Australia's kelp forests face significant threat. In eastern Tasmania, a 95% loss of Giant Kelp forests has occurred over the past four to five decades.

THE GIANT KELP FOREST RESTORATION PROJECT

Recognising the urgency of the situation, The Nature Conservancy (TNC) launched the Giant Kelp Forest Restoration Project in mid-2023. This pioneering initiative brings together key players of the Giant Kelp restoration sector, including the Institute for Marine and Antarctic Studies (IMAS) at the University of Tasmania, Natural Resource Management South (NRM South), the Commonwealth Scientific and Industrial Research Organisation (CSIRO).

The collaboration's primary focus is to restore Giant Kelp forests at ecologically significant scales, leveraging collective knowledge and experience. The project addresses the critical need for a comprehensive recovery plan for Giant Kelp and aims to establish a baseline understanding of its current distribution in Australia. This includes monitoring changes in surface canopy forests over time. Google Australia, through its Digital Future Initiative – a $1B investment in Australian research, infrastructure and partnerships funded NGIS to support this mapping effort.

A COLLABORATIVE APPROACH BRINGS HOPE AND OPPORTUNITY

The initiative employs cutting-edge technology and diverse datasets. Satellite imagery from Planet and the European Space Agency, along with machine learning capabilities through Google Cloud Platform, facilitates precise analysis of changes in Giant Kelp canopy cover from 2016 to 2023.

The collaborative approach draws on years of accumulated knowledge, offering a unique opportunity to recover Giant Kelp ecosystems. The project's approach includes accessing, processing, and modelling remotely sensed images. This data, combined with ongoing monitoring of Kelp Forest canopies, provides invaluable insights into the status of this iconic marine ecosystem. Identifying areas where forest extent is declining or expanding rapidly becomes crucial for informed conservation responses and integration into national economic accounts.

POTENTIAL FOR FAR-REACHING IMPACT

This collaborative project serves as a holistic response to the decline of Giant Kelp forests, aiming not only to restore ecosystems but also to contribute vital information for national conservation strategies.

NGIS is proud to be involved in this collaborative effort, blending expertise and technology. As Australia pioneers the restoration of its Giant Kelp forests, the project offers hope to the future of marine ecosystems globally.

Sustainable Fashion

In 2023, the Materials Impact Explorer (MIE) was publicly launched at the Textile Exchange Conference by Textile Exchange and its partners Google, WWF and NGIS. Built on Google Earth Engine and utilising the Google Cloud Platform, the MIE assesses the environmental risks associated with various fibres, considering factors such as biodiversity, climate change, greenhouse gases and water use.

The MIE provides capability for brands, retailers, and suppliers to evaluate potential impacts and dependencies at the origins of their supply chain in the countries where the farm, forests, or initial production facilities are based. The initial release of the MIE provided metrics and recommendations across the key categories of Climate, Biodiversity and Freshwater. In June 2024 the Materials Impact Explorer provided a significant update with additional risk categories for both forests and air pollution to further extend the ability to generate comprehensive country of origin risks and recommendations for global supply chains.

NGIS AND TEXTILE EXCHANGE PARTNERSHIP

NGIS and Textile Exchange have continued the investment into the MIE to provide a roadmap for both expanding risk and recommendation content along with addressing new and evolving frameworks and regulations. The 2024 update to the MIE included collaboration with a broad range of organisations, one of the tools users, **Veronique Rochet, Senior Director of Sustainability at PUMA**, has said,

"At PUMA we are currently taking steps to mitigate biodiversity risks and address environmental pollution risks through our 10FOR25 targets and supplier programs related to climate, chemicals, water, and air. We recently used the Materials Impact Explorer (MIE) tool provided by Textile Exchange to inform our biodiversity risk assessment of our key raw materials such as polyester and cotton.

The MIE tool has helped us to review if we have the right strategies in place to address the risk of the potential impact on biodiversity and the risk of dependency in terms of environmental assets and ecosystem services that our organisation relies on to function.

We value having forests included as a risk category. PUMA has already committed to sourcing all bovine leather used in our products from verified deforestation-free supply chains by 2030 or earlier.

The MIE tool analyses risk in terms of potential impacts and dependencies at the very start of the value chain (Tier 4)."

BEYOND MIE

NGIS and Textile Exchange have also been collaborating to provide a pathway for brand compliance to new laws and regulations such as the European Union Deforestation Regulation (EUDR). By combining the industry specific country level risk ratings and recommendations from the MIE with the first mile traceability and compliance workflows from TraceMark™, NGIS and Textile Exchange are providing a high value first mile traceability platform specifically designed for textiles. This TraceMark™ Fashion initiative is an opportunity for brands to get ahead of the impending EUDR curve in sustainable sourcing that has initially focused on food based commodities but will expand across textile commodities in the future.

TEXTILE EXCHANGE DRIVING POSITIVE CHANGE

Textile Exchange, a global non-profit organisation, is at the forefront of driving beneficial outcomes in climate and nature within the fashion, apparel, and textile industry across fiber and raw material production. They convene the industry to support their mission to inspire and equip people to accelerate the adoption of preferred materials through clear actionable guidance.

Sustainable Palm Oil

Palm oil is recognised as the world's most versatile vegetable oil. As well as a widely used cooking oil, it's found in over half of all supermarket products, from soap and toothpaste to chocolate and noodles.

When not managed and grown sustainably, palm oil can damage forests and endanger communities and destroy essential wildlife habitats. Around 90% of oil palm trees globally are located in Malaysia and Indonesia, islands with the most biodiverse tropical forests in the world.

Because palm oil requires up to nine times less land than other vegetable oil crops, its efficient use of land makes palm oil extremely attractive to producers and purchasers across the world. That's why it is crucial to establish a sustainable and responsible approach to palm oil production.

RSPO'S COMMITMENT TO SUSTAINABILITY

The Roundtable on Sustainable Palm Oil (RSPO) is at the forefront of global efforts to make palm oil sustainable. The RSPO partnership unites stakeholders across the entire palm oil value chain to set the parameters for sustainable palm oil production that protects the world's natural resources and wildlife habitats, and promotes the socioeconomic development of smallholders and rural communities across the world.

NGIS IN THE RSPO CONSORTIUM

In February 2025 RSPO with partners Agridence and NGIS launched prisma (Palm Resource Information and Sustainability Management). Aimed at enhancing trade and compliance with current and emerging global regulations, prisma is RSPO's advanced certification, trade, and traceability system that provides real-time data and analytics.

Transforming the palm oil industry by improving trade and compliance, organising information, and optimising supply chain efficiency, it represents a sustainability commitment, uniting stakeholders, standardising audit reports, and providing a seamless framework for global sustainability demands.

This innovative initiative integrates certification, trade, and traceability components into a unified and optimised system, with NGIS contributing its extensive expertise in geospatial technology, remote sensing, and risk analysis.
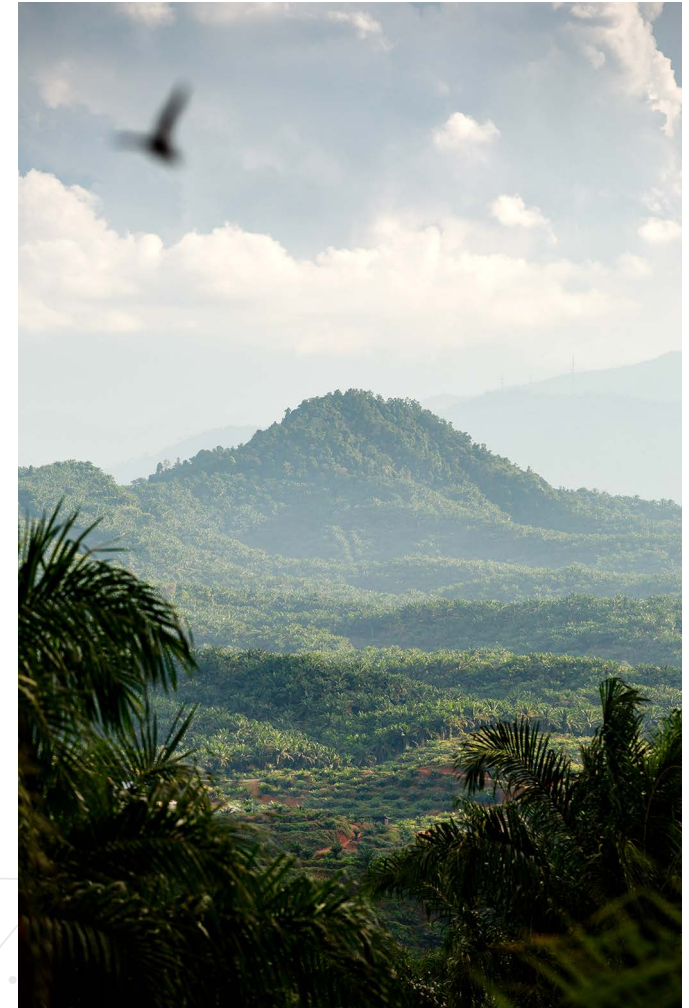
Sustainable Palm Oil (cont)

NGIS AND ITS ROLE IN DIGITAL TRANSFORMATION

NGIS brings its wealth of knowledge in geospatial technology, remote sensing, and risk analysis to the RSPO Consortium. Leveraging the TraceMark™ platform, prisma provides essential workflows for regulatory compliance including the European Union Deforestation Regulation along with core capabilities including:

- **Supply Chain Traceability** | Allows full supply chain traceability and provides the ability to monitor various near real-time and historical land change metrics, detected within sourcing areas, and to create benchmarks at all levels of the supply chain.

- **Risk Assessment** | Assess risk within sourcing locations by viewing near real-time fire and deforestation alerts. These alerts can then be interrogated by using before and after satellite imagery (including planet imagery), to rule out false positive detections.

- **Risk Mitigation** | Mitigate possible risks detected through the automated investigations of fire hotspots and land clearing reporting. This investigation flow takes users through submitting, reviewing, escalating, and closing investigations.

This digital transformation project is poised to have far reaching implications for the palm oil sector, serving as a model for other industries seeking to bolster sustainability practices and meet evolving regulatory requirements.

Digitally Transforming Supply Chains in the Coffee Industry

Coffee is the second largest exported commodity globally, behind only crude oil in traded volume. It is estimated that 3 billion cups of coffee are consumed every day, supported by a supply chain of over 12 million coffee growers globally.

Over 10% of all coffee is grown in Africa and around 30% of all coffee is consumed in Europe. With the implementation of the European Union Deforestation Regulation (EUDR) coupled with impacts of climate change there is a need to provide fundamental digital capability to ensure that African farmers are both able to participate in global supply chains as well as being resilient to climate change.

EMPOWERING FARMERS THROUGH FIRST MILE DATA OWNERSHIP

In October 2024 during the United Nations General Assembly in New York, NGIS in partnership with United Nations Industrial Development Organisation (UNIDO), Google, Lavazza, The International Coffee Organization and Illy launched the Sustainable Coffee Solution. A key driver for this solution is to provide supply chain traceability and land use monitoring capability to address the specific requirements of the EUDR. This solution aims to build foundational capabilities that will future-proof African coffee production, extending beyond regulatory compliance to include sustainable agricultural practices, value-added services, and climate finance solutions that mobilise public and private investments. By democratising data access across the entire supply chain and recognising farmers as central stakeholders, the solution focuses on equitable growth, reducing risks and ensuring fair value distribution throughout the value chain, fostering long-term resilience for Africa's coffee industry.

To comply with EUDR and future regulations, organisations will need to implement a due diligence and traceability system. The addition of geospatial information and validation provides an opportunity to engage with growers and producers to bridge the gap with technology. Digital capability is required to reduce the barriers to data sharing along with accelerating supply chain transparency through a data sharing ecosystem.

By leveraging digital transformation technologies such as Google's pioneering artificial intelligence (AI), and the TraceMark™ traceability and EUDR compliance platform, we are committed to empowering farmers, cooperatives, producers, distributors and roasters with accessible data-driven insights that optimise productivity while safeguarding ecosystems. This collaborative effort ensures compliance with current and future regulations like the EUDR, while setting a higher standard for sustainability, transparency and traceability across global markets.

The Sustainable Coffee Solution contributes to four United Nations Sustainable Development Goals (SDGs), a global framework designed to address the world's most pressing social, economic and environmental challenges. Guiding efforts toward a more sustainable and equitable future.

Advanced Vegetation Mapping to Identify Bushfire Hazard Areas

The Black Summer bushfires of 2019-2020 devastated Australia, burning more than 17 million hectares of land, and destroying over 3,000 homes. Southern Queensland was severely affected, the fires significantly impacted native forests and wildlife, exacerbating existing issues like deforestation and the effects of climate change

In response to the devastating fires, the Queensland Fire Department enhanced bushfire preparedness and mitigation. A key part of their strategy involved maintaining and improving state-wide vegetation mapping datasets – the Vegetation Hazard Class and Vegetation Structural State. These datasets are vital for identifying bushfire-prone areas and shaping development policies to reduce risk. To ensure these datasets remained accurate and actionable, the Queensland Fire Department partnered with NGIS to create an innovative machine learning approach for vegetation mapping.

Queensland covers an area of approximately 185 million hectares and has a wide variety of vegetation types. Understanding vegetation structure, like plant height, density, and types, is crucial for estimating fuel loads that drive bushfire risk. Conducting field surveys across the entire state was not practical. The Queensland Fire

Department needed a scalable, repeatable, and efficient methodology to keep vegetation data up-to-date and reliable so that land use plans developed by local governments can ensure future communities are resilient to bushfires. Accurate spatial data on vegetation structure is also critical for bushfire mitigation and operational planning.

To address these challenges, NGIS worked closely with the Queensland Fire Department to develop advanced machine-learning models to predict and classify vegetation features. These models used thousands of desktop vegetation assessments to supplement fieldwork. The methodology was designed to integrate seamlessly with the Queensland Fire Department's existing GIS tools.

High-resolution maps of vegetation attributes, such as plant height and density and updated classifications of Vegetation Structural State and Vegetation Hazard Class with improved accuracy at a 10-metre resolution were achieved.

This innovative solution has proven cost-effective and adaptable for large-scale vegetation mapping. The methodology has been applied to South-East Queensland, Wide Bay Burnett, Mackay-Whitsunday-Isaac and Central Queensland .

The benefits of the new methodology include:
- Improved efficiency through faster processing of large volumes of spatial data
- More accurate analysis of vegetation data
- Enhanced accuracy with better classification of vegetation attributes

Once vegetation data products have been subjected to on-ground validation and local calibration, Queensland Fire Depatment and local governments will be better placed to make informed decisions, as the reliable data helps identify at-risk bushfire areas to guide safe development planning, and improve emergency preparedness.

Feedback from the Queensland Fire Department and other stakeholders has highlighted the that data products are robust and fit-for-purpose. By providing clearer and more accurate insights into vegetation and bushfire hazards, the improved datasets support smarter decisions that help safeguard communities and prepare for future bushfire events.

Future Proofing Cities for Climate Resilience

The increasing frequency and intensity of extreme weather events, driven by climate change, have placed significant strain on urban infrastructure globally. From prolonged heatwaves and fires to intense storm systems, these disruptions are impacting network resilience causing widespread damage, severe flooding and traffic chaos on our roads.

On 16th April 2024, the United Arab Emirates and Abu Dhabi experienced one such event, with a storm system dumping more than a year's rainfall in just a few days. The UAE's National Center for Meteorology reported that parts of the country measured up to 250 millimeters (10 inches) of rain in less than 24 hours. Resulting in flooding, severely impacting traffic and infrastructure, this event exposed vulnerabilities in the city's emergency response.

TRANSFORMING FLOOD RESILIENCE

The Department of Municipalities and Transport (DMT) specifically Abu Dhabi Mobility (ADM) were able to utilise TraceMark™ Flow to understand and manage the immediate impacts of the floods whilst laying the foundation for improved preparedness and response strategies.

TraceMark™ is designed to assist governments and businesses to address the critical issues of traffic congestion and emissions impact, providing them with a comprehensive view of travel conditions and road network performance. In Abu Dhabi, the systems integration with Google Maps enabled near real-time traffic monitoring, allowing ADM operations team to:

- **Track disruptions** with near real-time traffic data from Google Maps, identifying areas experiencing congestion due to flood impact and enabling ADM to issue targeted traffic advisories and divert vehicles, minimising disruption and ensuring public safety.

- **Predict areas at risk of flood inundation,** based on travel time impacts, allowing ADM to identify flood inundation location for future mapping and evacuation planning.

- **Form a clear picture for situational awareness,** including emergency services vehicles, resources deployment by monitoring TraceMark™ Flow's data visualisation and alerting tools.

COLLABORATION TO DRIVE IMPACT

A key component of TraceMark™ Flow lies in its ability to communicate critical transport insights easily and effectively to enable real-time collaboration between ADM and other stakeholders such as emergency services. This collaboration ensures evidence based decision making, cross-agency coordination, ensuring a faster, more effective response to natural disasters and traffic disruptions.

BUILDING A SMARTER, RESILIENT FUTURE

Through the successful implementation of TraceMark™ Flow, ADM is strengthening its ability to manage traffic during extreme weather events, optimise traffic flow and enhance public safety ensuring they remain resilient, connected and prepared for the future.
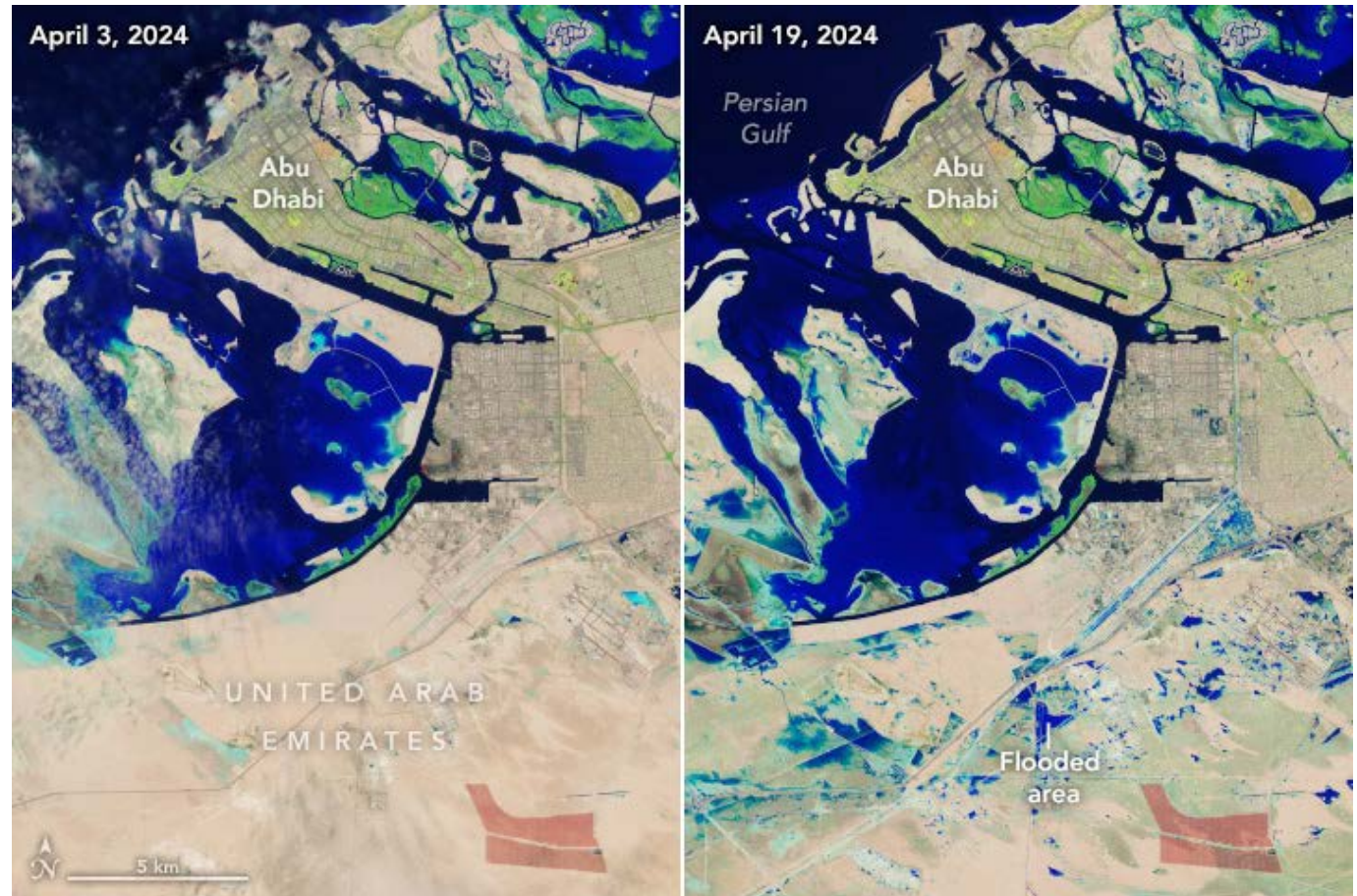
Neurodiversity in the Workplace

At NGIS, diversity and inclusion are part of the DNA, which shows in the makeup of the workforce. 6.5% of the team identify as First Nations peoples, 42% of the workforce are female, which is 60% above the industry average, and 42% of the team are under the age of 35. Together, these figures reflect a vibrant, inclusive culture that embraces different perspectives. Building on this strong foundation, NGIS is now working to better support neurodiversity, creating a workplace where everyone feels valued and empowered to thrive.

In the geospatial sector, precision and problem-solving are paramount, making diverse perspectives invaluable. Around 15 to 20% of the world's population is neurodivergent, yet neurodivergent individuals face an unemployment rate of up to 40%. NGIS is working with organisations like Australian Spatial Analytics (ASA) to challenge this landscape by welcoming neurodivergent individuals into its workforce. Their strong analytical skills, creative problem-solving, and keen attention to detail make them a natural fit for the geospatial sector.

FROM TRAINING TO CAREER SUCCESS

ASA is a not-for-profit social enterprise internationally recognised for championing neurodiversity in the workplace, providing talented spatial professionals with on-the-job training in a supportive setting, equipping them with the technical skills and confidence needed to transition into long-term careers.

Recently, four young analysts transitioned their employment to NGIS, an employer who values unique strengths and embraces diversity. ASA prepared the analysts for interviews and equipped the NGIS team with neurodiversity workplace training to ensure a smooth integration. This training provided NGIS with the knowledge and skills to create a neuroinclusive environment where everyone can thrive.
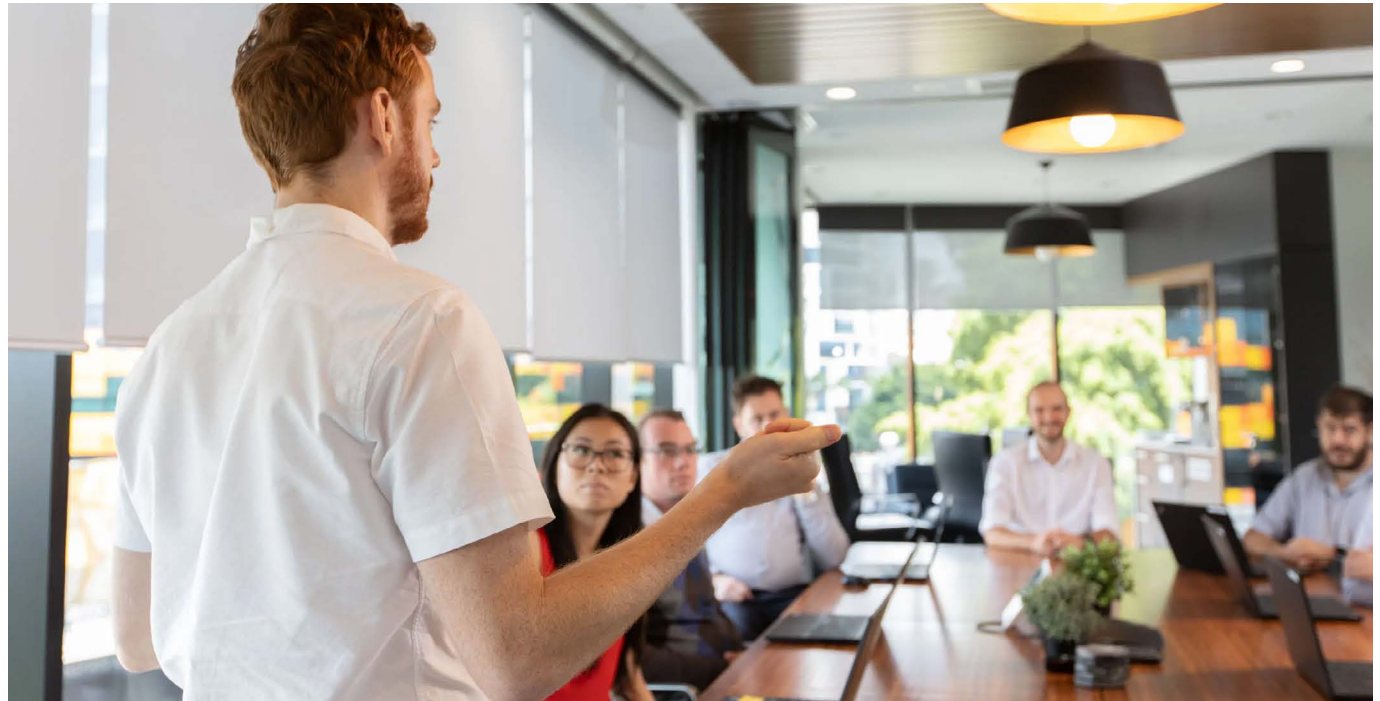
BUILDING AN INCLUSIVE WORKPLACE

Since joining NGIS, the analysts have showcased exceptional work ethic, dedication and problem-solving skills, significantly enhancing geospatial data analysis capabilities and providing immense value to clients. NGIS onboarded all four analysts simultaneously, enabling them to support one another, reducing the anxiety that can often accompany career transitions.

"When NGIS hosted its neurodivergent information session, seeing so many of my colleagues wanting to join and learn showed me that many people were wanting to know how to better connect, work with and understand people like myself. It showed me that everyone at NGIS was contributing to making it a safe space."—Jessica Colahan, GIS Analyst

The success of this initiative serves as a blueprint for other organisations seeking to leverage the strengths of a neurodivergent workforce. By embracing neurodiversity, NGIS continues to cultivate a workplace where different perspectives drive meaningful contributions.

"We're heartened by NGIS leading the way, embracing neurodivergent talent and hiring 4 superstar ASA team members. ASA is just a stepping stone for untapped talent, reducing autistic unemployment rates and solving the skills shortage. NGIS provides an exceptional platform for the analysts to develop their careers further in the geospatial industry. We look forward to our ongoing partnership with such an inclusive and forward-looking organisation."
—Samantha Garbutt, Chief People Officer.

NEURODIVERGENT PEOPLE BRING A WEALTH OF BENEFITS TO THE WORKPLACE

Enhanced problem-solving
Neurodivergent individuals often excel at thinking outside the box and creative solutions.

Strong analytical skills
Many neurodivergent people possess exceptional attention to detail and analytical abilities.

Increased innovation
Diversity of thought fosters a more innovative environment, leading to new ideas and approaches.

Improved employee engagement
A culture of inclusion creates a happier and more engaged workforce.

A Pathway to Sustainable Cities

As urban populations continue to grow, so do the challenges associated with traffic congestion. A global issue, congestion not only inhibits the movement of people and goods but also strains infrastructure and resources, compromises road safety, and accelerates one of the most pressing environmental concerns of our time, transportation emissions.

THE COST OF CONGESTION

Globally, the transportation sector is responsible for approximately 15% of all greenhouse gas emissions, a significant portion of which comes from the burning of fossil fuels like gasoline and diesel. These emissions contribute heavily to air pollution, climate change, and the degradation of urban environments. Every time a car idles in traffic or moves inefficiently through crowded streets, carbon dioxide and other pollutants are released into the atmosphere.

Beyond the environmental toll, congestion also has a severe economic impact. The INRIX 2024 Global Traffic Scorecard estimated that in 2023, traffic congestion cost the U.S. economy a staggering $81 billion. The Texas A&M Transportation Institute's 2023 Urban Mobility Report revealed that U.S. commuters alone lost 6.9 billion hours to traffic delays in 2021. This not only wastes time but also negatively impacts businesses, people, road safety, and the liveability of cities.

Traditional methods for understanding traffic are costly, slow and lack scalability. The absence of consistent historical and real-time data highlighted a critical gap, one that NGIS recognised as an opportunity. NGIS developed TraceMark™ Flow, an innovative platform that delivers real-time traffic intelligence aimed at enhancing the sustainable movement of people, goods, and services within urban environments.

By leveraging traffic data sourced from digital probes and user generated content, TraceMark™ Flow rapidly delivers comprehensive coverage for road network monitoring and optimisation. It enables cities, authorities, and businesses to track and manage transportation, offering actionable insights to increase network efficiency, journey planning and route optimisation, and ultimately reduce congestion and emissions. The real-time data is valuable not just for individual users but also for urban planners and transportation authorities looking to make informed decisions enabling sustainability and reducing the carbon footprint of urban mobility.

SHAPING SUSTAINABLE CITIES FOR THE FUTURE

TraceMark™ Flow goes beyond simply minimising traffic delays, it's part of a broader mission to create sustainable cities where transportation systems contribute positively to road safety, the environment and the economy.
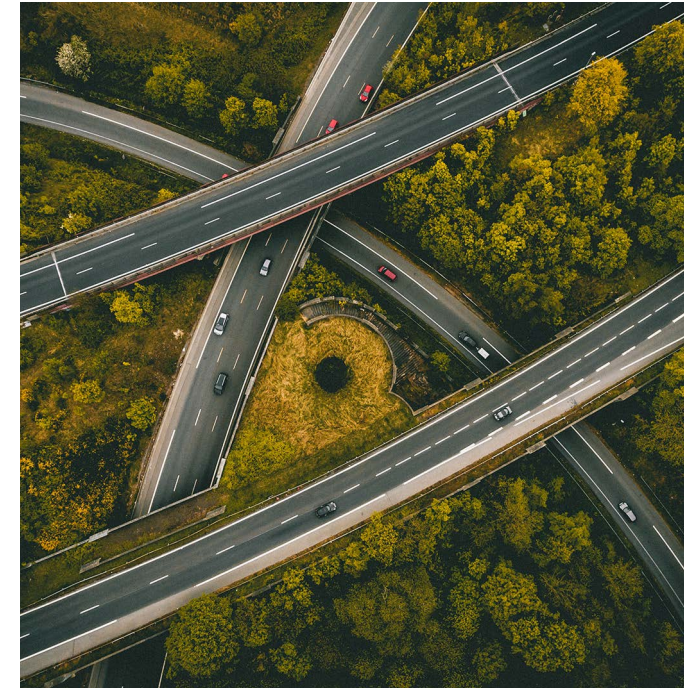
For businesses and municipalities, this means better route planning, less congestions, and more efficient transportation systems, all contributing to cleaner air, more time efficient commutes, and a reduction in the economic costs associated with congestion. The ability to integrate insights into day-to-day operations means that both businesses and cities can evolve towards greener, more efficient practices. In addition to environmental and economic benefits, TraceMark™ Flow also promotes livability and accessibility by tackling one of the most visible and persistent issues facing cities today.

Protecting Biodiversity in Manufacturing
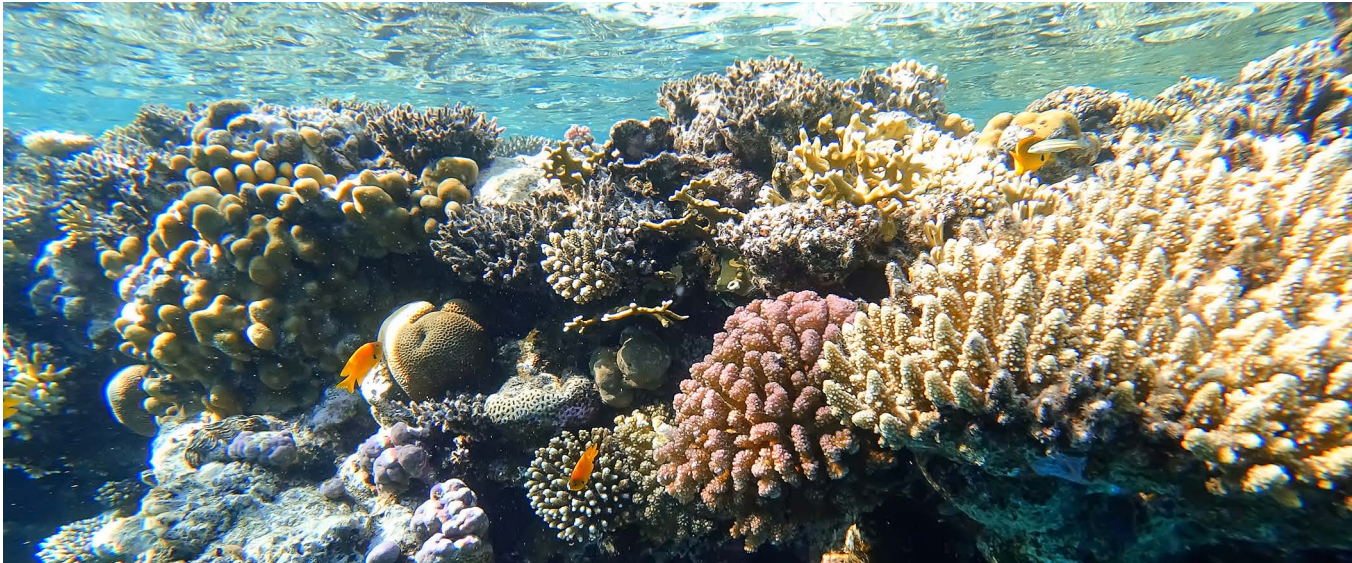
Biodiversity and nature provide all of the essential ecosystem services, including clean water resources, pollination activities, disease control, soil formation, climate regulation, cultural contributions and much more, that underpin the majority of global industries and supply chains today. Loss of these ecosystem services is projected to cost the global economy over $2.7 trillion by 2030. Recognising this, the United Nations Convention on Biological Diversity adopted the Global Biodiversity Framework (GBF) in 2021, prompting organisations worldwide to better understand and measure the interconnected impacts of business and nature.

Metrics will be required for current and future regulatory compliance and reporting purposes. However we also see a need for actionable insights that business users unfamiliar with ecology or ecosystem services resilience planning can use to develop tangible interventions. When negative impacts are identified, business users need clear recommendations and NGIS has been focused on building a platform to provide this.

There are a number of key capability challenges that companies face with implementing biodiversity monitoring and reporting systems including:

- Being able to directly address the requirements of leading global risk frameworks

- Analysing future sourcing risk, based on biodiversity metrics

- Accessing downscaled geospatial biodiversity data

Google, NGIS and Second Nature Ecology + Design are working together to enable Google to address key sustainability ambitions for its first-party hardware devices by implementing a new approach to the modelling of biodiversity impact, dependencies and risks in electronics supply chains through the TraceMark™ sustainable sourcing platform.

With a specific focus on aligning to key frameworks, this project operationalises a range of leading biodiversity frameworks including Taskforce on Nature-related Financial Disclosures (TNFD), Science Based Target Network (SBTN), EU Taxonomy Do No Significant Harm (DNSH) Criteria and the Global Biodiversity Framework. TraceMark™, powered by Google technology can be used to model 100+ datasets to deliver metrics that address key biodiversity requirements and targets aligned to leading frameworks. The resulting capability bridges the gap between goals and commitments and the frameworks required for reporting.

A DATA DRIVEN APPROACH FOR GLOBAL RISK ANALYSIS

The aim is to reduce operational complexity for implementing key biodiversity frameworks, accelerating the ability to set, monitor and meet commitments and regulations across the consumer sectors.
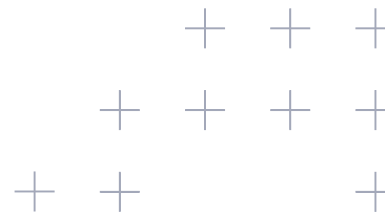
A Geospatial Data Driven approach for global risk analysis that delivers improved accuracy with scoring. By using detailed spatial datasets, organisations are able to move beyond simple spreadsheets to analyse specific risks leveraging complex spatial data.

The geospatial approach to biodiversity risk modelling and analysis is aimed at helping organisations meet reporting requirements and make informed decisions by:

- **Prioritising Mitigation Actions:** by comparing impact and risk scores across different locations, organisations can focus interventions where they will have the greatest benefit, whether by reducing harm or strengthening resilience.

- **Optimising Resource Allocation:** companies can allocate resources (e.g., habitat restoration or sustainable sourcing initiatives) to sites with the highest impact-to-risk ratio.

- **Ensuring Regulatory and Compliance Readiness:** understanding spatial variations in risk helps businesses anticipate policy changes and ensure compliance with evolving environmental regulations in different jurisdictions.

- **Improving Supply Chain Transparency:** multi-site comparisons help identify high-risk suppliers or regions, supporting strategic decision-making for procurement and operational adjustments.

- **Enhancing Stakeholder Engagement:** transparent comparisons allow investors, regulators, and local communities to assess corporate sustainability performance, fostering trust and accountability.

The resulting evolution to the TraceMark™ platform provides a pathway to preserving biodiversity in the supply chains for manufacturing. Future improvements will focus on several key capabilities to enhance and strengthen TraceMark™'s ability to support businesses in assessing and mitigating biodiversity risks.