



*sustainable mineral recovery*

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# ESG Sustainability Performance Report

For the year ending 31 March 2023.



Socialsuite



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# INTRODUCTION

**Geo40 (“Geo40” or the “Company”) is committed to the principles of environmental, social, and governance (ESG) excellence, as the most effective means of creating long-term enterprise value and addressing the societal priorities enshrined in the United Nations’ Sustainable Development Goals.**

In July 2021, Geo40 committed to commence reporting on the ESG disclosures of the Stakeholder Capitalism Metrics (SCM) of the World Economic Forum (WEF). This culminated with our first Sustainability Performance Report published in July 2022.

This second annual Sustainability Performance Report is for the year ended 31 March 2023 and builds upon our strong commitment to the principles of best-practice environmental, social, and governance performance.

For the year ended 31 March 2023, the Company has added four new focus metrics in addition to reporting again on our initial seven focus metrics from our inaugural 2022 report.

The initial seven focus metrics included Corporate Purpose, Board Composition, Stakeholder Consultation, and Anti-Corruption under the Governance pillar, Water Consumption under the Planet pillar, Health & Safety under the People pillar, and Research & Development under the Prosperity pillar. Strong progress has been made in all areas.

Management works with the Board of Directors to determine which metrics are most relevant to the nature of the Company’s business and its imperatives. Four new metrics have been selected for 2023: Risks and Opportunities under the Governance pillar; Greenhouse Gas Emissions under the Planet pillar; Diversity and Inclusion under the People pillar; and Rate of Employment under the Prosperity Pillar. The selection of these metrics provides broad coverage across the governance, planet, people, and prosperity sectors.

The measures have been selected from the WEF’s 21-core metrics, and we continue to review our performance quarterly, with formal reporting annually against these metrics.

Within Socialsuite’s ESG platform, we use the WEF’s universal ESG framework to align our mainstream reporting on performance against ESG indicators. By integrating



ESG metrics into our governance, business strategy, and performance management processes, we diligently consider ESG thinking in the day-to-day running of our business. We continue to look for opportunities for further transparency on the topics which are material to our business.

To track our disclosure progress and demonstrate our sustainability performance against the WEF SCM framework, we utilise a disclosure platform by the global ESG software-as-a-service enterprise, Socialsuite. This platform enables us to demonstrate our ongoing commitment to ESG by providing a dedicated solution to track, report, and share our ESG disclosures in the form of a set of universal, comparable, and established metrics.

As stated in our last report, with the ESG reporting platform and valuable ESG guidance from Socialsuite, ESG thinking within Geo40 is strengthening and our work continues to create opportunities that support a sustainable future.

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# A NOTE FROM THE BOARD CHAIR AND CEO

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## Shareholders,

We are delighted to bring you our second Sustainability Performance Report for the year to 31 March 2023.

With the Company now over ten years old, we are continuing to build upon the strong sustainability foundations in place since we started. Our broader valued partnership with Ngāti Tahu/Ngāti Whaoa, who own the land beneath our two Ohaaki silica plants, continues to strengthen, and their role as kaitiaki, or guardians, has never been more relevant. Our relationship with Taupo Māori continued to strengthen through the year as the broader indigenous tribe, or iwi, Ngāti Tūwharetoa, made their first step in technology by investing in Geo40. We're thrilled by their belief in us.

As we mature our direct lithium recovery technology, our work in silica is proving more relevant than ever. Our sustainable, closed-loop assets for the recovery of silica separate us from many of our peers in lithium and provides assurance to potential counterparties of the most exemplary environmental, social, and governance performance. Few can claim our expertise in mineral recovery from fluids.

This performance record is helping us to attract trusted potential partners across the globe, in turn providing us with opportunities to deploy our technology. When we combine this with a loyal and committed workforce, and a Board which exercises strong governance in all areas, we know we can do remarkable work.





This ethos of developing sustainable technology for mineral recovery is very much at the heart of the Company, and our deliberate focus on environmental, social, and governance (ESG) activities will only strengthen the Company further.

Customers, investors, and partners expect us to formally report, not just on where we are, but on where we see opportunities to continue to improve. As such, alongside reporting again on our performance against the initial seven ESG metrics, we have added an additional four metrics that we are reporting on for the first time. We look forward to continuing to openly disclose our work on ESG in the years ahead.

At a Governance level, this year we are reporting again on Corporate Purpose, Board Composition, Stakeholder Consultation, and Anti-corruption metrics.

Within the governance area this year, we have added reporting against the Risks and Opportunities metric.

In the Planet sector, we are reporting again on Water Consumption, which is emerging as a key topic in direct lithium extraction and remains highly relevant to our business. This year we have added reporting against the Greenhouse Gas Emissions metric, which is well-aligned with our work on measuring the carbon footprint of our silica products.

In the People pillar, we retain our strong focus on Health and Safety performance, given the hazards in the geothermal environment. We commenced reporting against the Diversity and Inclusion metric, which is appropriate given our relationship with indigenous Māori, and in reflecting our increasingly diverse highly-skilled workforce.

In the Prosperity sector, we continue to report on our Research and Development activity as we ramp up our work in lithium recovery and start to scale up our technology. As our sphere of activity grows in Taupo, across New Zealand, and now globally, we add a new metric that considers the Rate of Employment. We are confident that this new, broader set of measures provides wide coverage of our business activity and provides real transparency to stakeholders.

ESG reporting is an opportunity to put a real focus on the things that matter, beyond the day-to-day running of the business. It engages the board, management, and the wider Company in the key topics that both drive the business forward and make us impactful, in terms of our people and the planet. We work to ensure that the whole organisation buys into our ESG work as it is critical to all we do. We know that being good at these things will also drive shareholder value.

We look forward to continuing to report on our progress as we move forward.

**Bill Turner**  
Board Chairman

**John Worth**  
CEO & Managing Director

# WORLD ECONOMIC FORUM ESG METRICS

For the reporting period ending 31 March 2023, Geo40 continued to focus on our initial seven metrics whilst also adding four new metrics. These combined 11 measures for 2023 allowed Geo40 to embed wider ESG thinking across the Company.

This diagram illustrates the focus metrics initially reported on in 2022, which are now attached to the inner pillar circle. The new focus areas for 2023 are shown most peripherally. The remaining focus metrics not yet reported on are shown slightly disconnected from the inner circle.





## The seven Focus Metrics reported on initially in 2022 are as follows:

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### Governance

1. Corporate purpose
2. Board composition
3. Stakeholder consultation
4. Anti-corruption

### Planet

5. Water consumption

### People

6. Health & Safety

### Prosperity

7. Research & Development

## The four new focus metrics measured for the first time in the twelve months to 31 March 2023 are as follows:

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### Governance

8. Risks & Opportunities

### Planet

9. GHG emissions

### People

10. Diversity & Inclusion

### Prosperity

11. Rate of Employment

The Company's performance across each metric is presented.

# AN UPDATE ON GEO40 ESG FOCUS METRICS REPORTED IN 2022



## 1. Governance: Corporate Purpose

In 2022 Geo40 worked to more clearly articulate the purpose of the Company, as captured below:

*Geo40 develops and deploys unique and innovative technologies for the sustainable recovery of valuable minerals from underground fluids. This supports the global transition towards a cleaner energy future.*

As reported in 2022, we established our Company Purpose Statement, being *Sustainable Mineral Recovery*. We have adopted and implemented our Purpose Statement within our updated logo and this is used across all marketing collateral.

Communicating our purpose has become easier with the emergence of the direct lithium extraction industry and its imperative in playing a role in lithium supply. This, alongside our own work in lithium, has helped the Company's purpose be better understood in 2023.

We believe our purpose statement defines our intent clearly to all stakeholders.

As Geo40 continues to evolve, we will seek to continue to effectively communicate our purpose with all stakeholders as part of our ESG commitment.







## 2. Governance: Board Composition

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Geo40's Board composition was reviewed in 2022 and is an area where ESG thinking was already present within our business.

The Geo40 Board composition is relatively diverse, where each Board member's background includes distinct business expertise and sound management experience. Each member brings a diversity of thought which has driven success throughout the business.

We have the following policies in place to ensure this continues as we move forward:

- The Company Constitution
- The Board Charter
- The Committee Charters (3)

Geo40 maintains an ESG-inclusive board skills matrix to ensure that the board and broader company can create long-term value for all stakeholders from an economic, social, and environmental perspective.

The board has been focused on succession planning through 2023, and in doing so remains mindful of ensuring that a diverse mix of directors is maintained.

Please visit our website, <https://geo40.com/about/board-of-directors>, to meet the board.



## 3. Governance: Stakeholder Consultation

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Geo40 acknowledges the importance of continuing to positively interact with all stakeholders as we move forward. Continuing to nurture, maintain and develop relationships with our partners is critical to the Company.

In 2022, we took the opportunity to review and improve our stakeholder consultation structures and mechanisms and this was beneficial. Through 2023, management has engaged with a much wider range of stakeholders as the Company seeks to license its technologies.

Throughout the financial year, the Company has been particularly engaged with Contact Energy around steamfield operations and the resulting brine composition at our assets.

Being present and engaged with a wider group of key current and future stakeholders will be an essential part of Geo40's success.



## 4. Governance: Anti-Corruption

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To ensure compliance with relevant Anti-Bribery and Corruption legislation and best practice, the Board and Lead Team met and conducted Anti-Bribery & Corruption Training in September 2022. Attendance by the Company's senior leaders was mandatory, and a training record was signed by all attendees and kept for recording purposes.

Chair of the Board, Mr Bill Turner, who is our resident specialist in this area, presented to the group a presentation entitled, *Mitigating Bribery & Corruption Risk*, by the Australia-Africa Minerals & Energy Group. The presentation was well received and covered topics such as definitions, current global

statistical data with a focus on Australasia, and the potential impacts of an increasingly-global collaboration network of anti-corruption regimes.

The Company maintains both a Code of Conduct and an Anti-Corruption policy. Geo40 recognises a duty of care to protect all stakeholders of the Company in this field and is pleased to advise of zero bribery or corruption cases to date.

We have included our training dates within our Master Training Register which is maintained by our Leadership Team.



## 5. Planet: Water Consumption

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As outlined within our 2022 report, a review of our local environment was completed, specifically in respect of our freshwater usage within the Water Atlas Programme framework. The review determined that Geo40's Ohaaki production site and surrounding area were categorised as low risk.

We have continued to measure and monitor our water consumption daily and this information is reported to key stakeholders on a monthly basis.

All water used throughout our production processes has been within our allowed-usage limits as set out within Contact Energy's water resource consent of 1,000 tonnes per day.

For the year ending 31 March 2023, Geo40's water usage was 181,237 tonnes or 496.54 tonnes per day.

This is a higher usage number than reported in 2022 and we see this as an opportunity for our team to continue to look to improve our processes. By improving our plant production and reliability, our water consumption will decrease in the future.



## 6. People: Health & Safety

Geo40 is committed to maintaining and improving our Health & Safety (H+S) culture across the Company. The well-being of our employees and partners is of paramount importance to the Company.

H+S touches all areas of our business. We must work actively to safeguard all stakeholders and to ensure compliance with best practice and all regulations and procedures intended to prevent accidents or injuries. Continued vigilance will help to keep everyone safe, and will remain a key focus for the Company.

The Company made considerable progress during 2022 in moving to a new and more robust H+S framework. This included a revision of the H+S Policy and substantial development of the underlying internal framework to support our day-to-day activities. Compliance with legal and social obligations has been considered further this year.

It is anticipated that during 2023 and beyond, the focus will switch from the development of the H+S system to implementation, by embedding it throughout our organisation. A weekly H+S meeting is in place with representatives from all areas of the business and provides

a continual improvement driver of the system as we grow. This links directly with our Culture, Well-being, Diversity & Inclusion Plan.

Geo40 measures significant H+S metrics. The key metrics utilised to capture Geo40's H+S performance for the year to 31 March 2023 are presented below:

### H+S Statistics for 1/4/2022 to 31/03/2023.

Fatalities: 0

Raw Total Recordable Incidence Frequency Rate (TRIFR): 4 (internally we have factored this to 1.6 to reflect the small size of our company)

Total Recordable injuries and illnesses: 1 (Sprained ankle)

Lost-time incidents (LTI): 1 (Sprained ankle as above)

Medical treatment incidents (MTI): 0

Restricted work injury (RWI): 0

Safety observations: 64



## 7. Prosperity: Research & Development

Research & Development (R+D) has been at the forefront of Geo40 since the formation of the Company. Our dedication to developing scalable cutting-edge technologies within the mineral recovery sector continues to be central to our success.

For the past 12 months, exploring new approaches to mineral recovery has been challenging and rewarding. In 2023, we have made very significant progress in both silica and lithium. Our unique range of sustainable colloidal silica products continues to grow, with a focus on customised solutions for a growing number of markets around the Pacific Rim.

The Company's progress with its direct lithium extraction (DLE) technology was significant for the year to 31 March 2023 and continues to be a key R+D focus for the business.

At the conclusion of the year, the R+D team had completed and fully documented primary work on our fundamental DLE process. The R+D team has worked to process a range of both synthetic and real brines to prove the relevance of the company's DLE technology across six primary brine types. We have been successful in recovering lithium from high silica geothermal brines, high Mg/Ca Salar brines, low silica geothermal brines, and oil field production waters.

During 2023, our R+D activity also included preliminary scoping work on techniques to recover other minerals, including caesium and boron.



## NEW ESG FOCUS AREAS FOR THE YEAR ENDING 31 MARCH 2023

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**For the year ending 31 March 2023, Geo40 identified a further 4 key focus metrics to supplement our initial seven reported on for the year ended 31 March 2022.**

Importantly, the suite of metrics selected continues to provide good coverage across the four WEF pillars of Governance, People, Prosperity, and Planet. The four new metrics chosen for 2023 and how they fit into the WEF Framework are illustrated on page 4.



## 8. Governance: Risks & Opportunities

A key aspect of our business is our ability to manage a range of risks attached to the opportunities we are pursuing. This is an intrinsic constant in all areas of our business, and is particularly acute in a start-up organisation such as Geo40.

The Board acknowledges that developing and implementing ESG thinking within Geo40's approach to Risk & Opportunity (R+O) will further support value creation for all stakeholders. Our Risk & Sustainability Committee oversees this important business topic and signals our focus in this area.

We utilise three principal management platforms where R+O are considered and documented. R+O Meetings are held weekly on Tuesday, a monthly Lead Team meeting is held where R+O features prominently, and a Corporate Risk Register is maintained.

Our weekly R+O meeting supports the management of the Company's current workflow. It is a forum where co-workers raise cross-divisional risks and opportunities and seek support toward effective outcomes. Each member of the meeting is encouraged to voice their concerns or ideas. Risks and opportunities are tracked over time to ensure the business learns from this process.

Geo40 maintains a Corporate Risk Register which is reviewed

and updated quarterly by the Board's Risk & Sustainability Committee. The reporting structure allows Geo40 to collate, rank and summarise our current business risks, including ESG risks. The ten risks with the highest residual risk attract specific focus.

Each identified risk is categorised by Risk Type, Risk Location, and Business Area. Under Risk Type, each risk is labelled as either a divisional risk or an ESG risk to the business.

Management apply specific focus to ESG risks regularly, covering both existing and potential ESG risks.

Every risk is scored by an impact/consequence matrix alongside current risk management controls. A second iteration of risk management is then applied where additional treatment strategies are developed. A re-ranking of the risk impact and consequence illustrates the effectiveness of the additional risk controls, leading to a net residual risk.

We have strong coverage of current and potential ESG risks across all four of the ESG pillars by including applicable ESG metrics within our Risk Register.

Geo40's current Corporate Risk Register column headings are shown below:

No	Risk Issue Type Location	Area	Cause	Potential Impact / Consequence	Current Controls Current Control Effectiveness (0 - 5) 0 = None 5 = Fully Effective, no more improvements	Initial Risk Consequence Risk Ranking Ranking	Additional Treatment Strategies to be implemented	Residual Risk Consequence Risk Ranking Ranking	Risk Owner
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The combined effect of the Company's risk management tools and processes is a robust management of the broad spectrum of risks faced by the Company. The various forums encourage diversity of thought and wide socialisation of risk across the business, and ensures that the Board of Directors can fulfil its obligations around risk management.



## 9. Planet: GHG Emissions

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In 2023, Geo40 started to quantify the greenhouse gas emissions (GHG) of our world-first silica recovery process. Industry expert Thinkstep ANZ was engaged to support the Company in compiling upstream, core, and downstream (Scope 1, 2 & 3) emission factor data that contributes to a wider product Life Cycle Assessment (LCA) and our first Environmental Product Declaration (EPD), forecast to be published in 2023.

Assessing the factors that contribute to our carbon footprint has been a significant task but has also created improvement opportunities for the Company. Opportunities to reduce and recycle elements within our production flow have been identified and captured.

The sustainability of our products is a key differentiator for the Company. This is important to our customers but also to our stakeholders more widely. Being able to prove this through

third-party certification will be valuable, both in terms of the pricing received for our products and in how the Company is seen by partners and investors.

The opportunity to contrast the natural nature of our mineral recovery processes against conventional mining methods is significant. Completing this LCA will allow Geo40 to consider and set stewardship targets.

Once our LCA and EPD are complete, Geo40 will look towards positioning our emissions in line with the Paris Agreement (2015) by setting specific reduction targets.

Geo40 acknowledges the Green House Gas (GHG) Protocols for preparing a corporate-level GHG emissions inventory, however, we have not measured this at an organisational level to date. We would look to incorporate this scope in our future LCA assessments in the future.



## 10. People: Diversity & Inclusion

Geo40 recruits and trains a diverse collection of people, and our successes are a function of high-performing teams with very diverse makeup. Geo40 works to encourage diversity and inclusion in all areas of its business.

Developing world-first mineral recovery processes is a complex journey. Geo40 relies on exceptional calibre generalists and specialists, and our ability to attract, retain and train key personnel is key to our success, both locally in New Zealand and, increasingly, globally. The same is true more broadly in respect of the Company's key stakeholders and partners. In addition, Geo40 operates on indigenous-owned land, with strong partnerships with local and broader indigenous groups. There are many touchpoints in these relationships, ranging from cultural links, to employment and investment relationships.

The Company's collective of experts has an inherently wide variety of cultural and employment backgrounds. We welcome this diversity of thought, which supports our ability to innovate successfully. Geo40 applies strong ESG thinking within its employment strategy to recruit and bolster the talent base across the Company.

Geo40 has a suite of specific policies to develop and manage diversity and inclusion within the Geo40 business.

These policies include:

- Whistleblower Protection,
- Code of Conduct Policy,
- Equal Opportunities & Diversity Policy, and
- Conflict Resolution, Harassment, and Bullying Policy.

These policies create a cultural expectations framework for all the Geo40 team.

Geo40 works to implement a strong inclusive culture through a live Culture, Well-being, Diversity, and Inclusion Plan. The plan seeks input from staff annually based on what matters most to them. This objective of the plan is for Geo40 to be an 'employer of choice', building a solid and inclusive cultural base to attract and retain the best possible expertise within the Company.

The Plan went through annual review earlier in 2023, and was amended significantly from The Plan in place for the prior year. The H+S Lead Team monitors delivery against this plan and successful delivery is measured as a key success factor in staff annual reviews.

New components of The Plan for 2023 included a focus on creating opportunities for staff to build cross-team relationships, improving the diversity of knowledge for people across our organisation, and encouraging staff to actively consider personal well-being. Our H+S Lead team, a group of staff with representation across all business units, meets weekly to ensure The Plan's successful implementation, building a strong H+S culture.





## 11. Prosperity: Rate of employment

Geo40 recognises that its people are an integral driver of its success. Staff who gain satisfaction from their work contribute strongly to long-term value for our stakeholders. Our approach seeks to instil values of family, partnership, and belonging.

We are a New Zealand Company grounded in the three Māori principles of kaitiakitanga, auaha, and kotahitanga.

- Kaitiakitanga refers to stewardship of the natural environment
- Auaha describes the spirit of innovation that we bring to all we do
- Kotahitanga is widely translated as meaning partnership, but a more accurate broader description also captures the concepts of unity and togetherness

These principles together capture both the spirit within Geo40, and the imperatives faced by the business. They provide a strong foundation for our broader ESG work.

As part of our monthly Board reporting, our people & culture section provides detail on gender and age diversity, turnover rate, and new additions to the Geo40 team.

Our rate of employment statistics for the year ended 31 March 2023 are as follows:

- Total number of employees and direct labour-hire contractors is currently 23.
- The gender spread is 74% male and 26% female.
- Age Brackets; 15-24 years 8%, 25-44 years 42%, 45-64 years 50%.
- Year-to-date turnover rate is 38%
- Appointments: 8
- Resignations: 8

## REMAINING WEF DISCLOSURE CATEGORIES

The Company has strengthened its commitment to ESG principles with the publication of this second Sustainability Performance Report in partnership with Socialsuite, for the year ending 31st March 2023.

For the past 12 months, Geo40 has developed its business in line with ESG stakeholder-capitalism best practices. As we continually seek to add long-term value for all stakeholders, we will ensure that ESG thinking is central in all we do.

Outside of the 11 focus metrics Geo40 has reported on this year, the Company has made initial progress on a number of the remaining 10 focus metrics that are relevant to the business, and looks forward to broader reporting in the 2024 report.



