



MAG SILVER



2021 Sustainability Report
POSITIONED FOR GROWTH



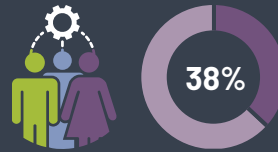
A Message from Jim Mallory, our Chief Sustainability Officer

MAG Silver is committed to sustainable development and I am excited to be part of this journey, refining our approach to sustainability as we move from explorer to developer to producer. We've progressed significantly to embed sustainability in our culture and business processes through the implementation of tools and support systems and communications through our inaugural sustainability report. We are moving forward with a clear focus to engage with our people and other stakeholders by taking the time to listen, learn and respond to their ESG performance expectations.

I cannot overemphasize the importance of addressing material topics for sustainable development and as we work to manage these risks, we're building the path towards sustainability.

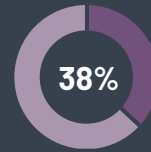
Cover: The Juanicipio Project, under construction in 2021

KEY GOVERNANCE PERFORMANCE INDICATORS (2021), MAG CORPORATE



BOARD DIVERSITY

Women:
3 of 8 Directors (38%)



MATERIALITY ANALYSIS

Analysis updated 2021, includes
Juanicipio JV Project, Mexico



NEW/UPDATED POLICIES

Human Rights, Diversity Equity
& Inclusion, HSE&SR, ERM



CLIMATE & TCFD

Review Completed
in 2021

KEY SOCIAL PERFORMANCE INDICATORS (2021), JUANICIOPIO PROJECT



WORKFORCE

Total: 2,929
Local: 61% (Zacatecas)



COMMUNITY INVESTMENT

Priority UN SDGs
Total: US\$ 44,353



HEALTH & SAFETY

LTIFR (1M hours): 10.08
Fatalities: Zero



GRIEVANCES

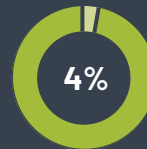
Community Grievances: 12
(4 carried over from 2020)
Labour Grievances: Zero

KEY ENVIRONMENTAL PERFORMANCE INDICATORS (2021), JUANICIOPIO PROJECT



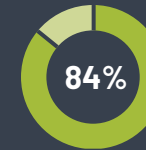
FRESHWATER USE

Freshwater Water (Wells): 7,000 m³ (4%)
Municipal Wastewater: 164,000 m³ (96%)



ENERGY & GHG

Renewable Power Ratio: 84%
Total Energy Use: 334,470 GJ
Total GHG (Scope 1 & 2): 20,050 tCO₂e



MANAGEMENT SYSTEMS

ISO 14001 (Environment)
ISO 45001 (OH&S)
In Progress

Diversity - Diversity, Equity & Inclusion, ERM - Enterprise Risk Management, ESG data for FY2021 (100% Juanicipio), GHG - Greenhouse gas emissions, GJ - Gigajoule, HSE&SR - Health, Safety, Environment and Social Responsibility, ISO - International Organization for Standardization, LTIFR - Lost Time Injury Frequency Rate, Material Topics - Water, Environment, Tailings Facilities, Climate, Health & Safety, Human Rights Local Communities, Business Ethics, and Transparency, TCFD - Task Force for Climate-related Financial Disclosure, tCO₂e - tonnes of carbon dioxide equivalent, UN SDG - United Nations Sustainable Development Goals. For further information, also on key ESG polices, please visit <https://magsilver.com/esg/esg-overview/>



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Underground workers at the Juanicipio Project

ABOUT OUR REPORT

This is MAG Silver Corp's ("MAG Silver") inaugural, annual Sustainability Report, produced to provide a transparent account of how we addressed key material Environment, Social and Governance ("ESG") topics in 2021.

This report outlines the strategy, policies and management approach followed by MAG Silver acting independently with Fresnillo plc ("Fresnillo"), when referring to the Juanicipio Project. In this report, references to "we", "us" and "our" refer to MAG Silver and its subsidiaries, and when referring to the Juanicipio Project, refer to MAG Silver with Fresnillo as the operator.

This report focuses on MAG Silver's 44% owned Juanicipio Project (located in Zacatecas State, Mexico), which is operated by Fresnillo (56%), and the Deer Trail Project (located in Utah, USA), which we operate and have the right to earn a 100% project interest. When applicable, we include information regarding MAG Silver's corporate office (located in Vancouver, Canada). The Larder Project (located in Northern Ontario, Canada) will be included in subsequent Sustainability Reports to reflect its acquisition in 2022.

All financial figures are quoted in US dollars. Data and information presented in this report have been aggregated and prepared by MAG Silver's sustainability team, supported by external consultants. The report has been reviewed internally by MAG Silver's executive team and the Board of Directors (the "Board"). The data in this Sustainability Report have not been externally verified.



Worker at the Juanicipio Project Processing Plant.

Acknowledgment

MAG Silver would like to acknowledge the assistance of Fresnillo and the Juanicipio Project team in providing the data and information contained within this report for the Juanicipio Project, and for the ongoing collaboration through our technical committees, senior management and department heads. We would also like to acknowledge the assistance of the Deer Trail Project team in providing the data and information contained within this report for the Deer Trail Project. This report is a reflection of the tremendous efforts that the Juanicipio and Deer Trail Projects made in 2021 in the areas of Environment, Social and Governance.

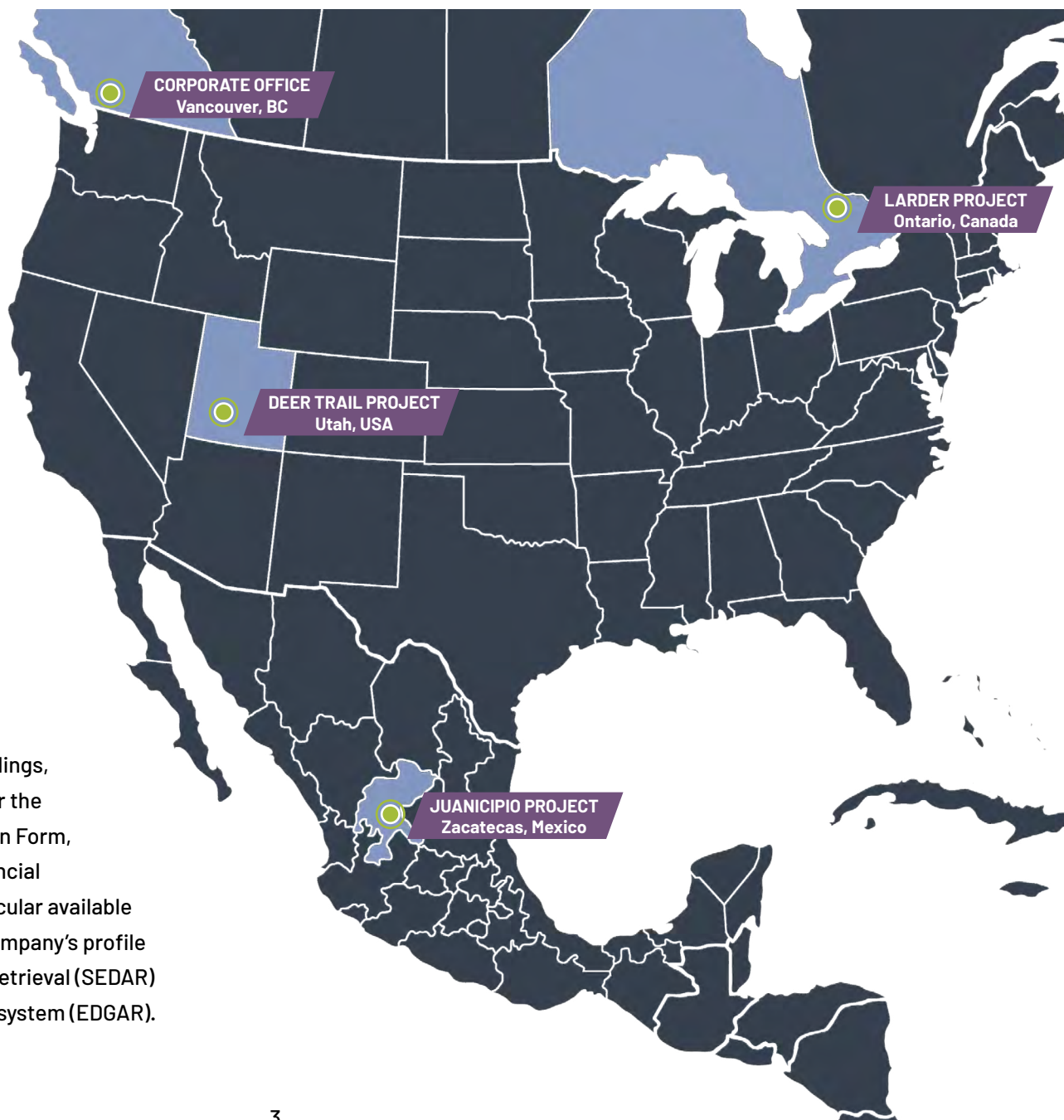


The Juanicipio Project Under Construction

ABOUT US

MAG Silver is a Canadian development and exploration company focused on becoming a top-tier, primary silver mining company by exploring and advancing high-grade, district-scale, silver dominant projects in the Americas: the Juanicipio Project in Mexico; the Deer Trail Project in Utah, USA; and, the 2022 acquisition of Gatling Exploration and its Larder Project in Northern Ontario, Canada. MAG Silver's principal focus and asset is the Juanicipio Project (44%), with Fresnillo (56%) as the operator. Headquartered in Vancouver, Canada, MAG Silver has ten employees and three full-time consultants. The Juanicipio Project has a workforce (Fresnillo employees and contractors) of 2,929 people and the Deer Trail Project has a workforce (full-time and part-time contractors) of 13 people. MAG Silver shares trade on the Toronto Stock Exchange and New York American Stock Exchange under the symbol "MAG".

Additional information regarding the nature of our holdings, legal structure and financial and operational results for the reporting period can be found in our Annual Information Form, Quarterly Management's Discussion and Analysis, Financial Statements, 40F and the Management Information Circular available on the MAG Silver website and accessible under the Company's profile on the System for Electronic Document Analysis and Retrieval (SEDAR) and Electronic Data Gathering, Analysis, and Retrieval system (EDGAR).



VISION

MISSION

VALUES

Our vision and mission are to unlock value through the exploration, discovery and advancement of world-class, silver dominant assets by generating a portfolio of projects whose responsible development benefits all our stakeholders.

Our core values define our culture and guide our behaviour and actions.

VALUE CREATION

Our long-term focus is delivering our best through technical excellence, discipline, science-based exploration, discovery and advancement.

CARE

Caring is part of our DNA. The health and safety of our people, the collective responsibility to our communities and our planet, and the management of our impact to society are fundamental to who we are.

OUR UNIQUE CULTURE

We build honest relationships, and promote transparency, communication and collaboration while acting with respect and integrity.



“Regular ongoing engagement is an important aspect of our culture where we continually seek to promote transparency and communication, building honest relationships through collaboration, respect and integrity”
– George Paspalas, President & CEO

A Message from George Paspalas, our President and Chief Executive Officer

It is my pleasure to share MAG Silver’s inaugural Sustainability Report. This report outlines our approach to sustainability across key governance, health and safety, social and environmental topics, and summarizes our 2021 sustainability performance.

We are proud of our progress in advancing our sustainability commitments as we transition to production at the Juanicipio Project in Mexico, continue our exploration activities at the Deer Trail Project in Utah, and grow the Company – as demonstrated by the Larder Project acquisition in Northern Ontario in 2022.

The construction of the Juanicipio mine, our flagship asset, was completed as planned at the end of 2021; however, the commissioning timeline was extended, awaiting approvals for the final tie-in to the electrical grid. Sustainability highlights from our Juanicipio Project are included in this report.

This Sustainability Report reflects our commitment to increased stakeholder disclosure and dialogue over sustainability matters. In 2021, we joined the UN Global Compact to affirm our commitment to implementing, disclosing and promoting its Ten Principles, covering Human Rights, Labour, Environment and Anti-Corruption. This Report serves as our first Communication on Progress.

Improving ESG Performance

The health and safety of our workforce will remain our top priority: All of us at MAG Silver assume the collective responsibility for their well-being and ability to work safely, returning to their homes without incident or injury.

MAG Silver’s Board of Directors continues to focus on providing effective oversight of our material risks and sustainability matters, while guiding the integration of these matters into MAG’s governance, strategy and risk management processes. Moreover, the Board is focused on how management’s responsibility for risk mitigation and sustainability matters are assigned throughout the Company.

In 2021, we conducted a review aligned with the recommendations of the Task Force on Climate-related Financial Disclosures (“TCFD”). The resulting preliminary climate risk assessment will be further developed in 2022 through discussions with Fresnillo at the Juanicipio Project, and through ongoing climate risk assessments at our exploration projects.

A Message from George Paspalas, our President and Chief Executive Officer

Positioned for Growth

As MAG Silver continues to grow and transitions into production, so too will our approach to sustainability evolve. We are committed to strategic growth and responsible resource development for the benefit of our stakeholders and society.

Looking ahead, we are excited about new opportunities to engage with our stakeholders and responsibly grow MAG Silver through continued exploration in Mexico, the United States and Canada. Addressing climate risks across all of our activities and building a safe, inclusive and diverse workforce are priorities that I am confident the MAG Silver team will embrace with enthusiasm.

For the moment, I invite you to learn more about our approach to sustainability through our inaugural Sustainability Report, and I encourage you to share your thoughts with us along this journey.

Sincerely,



George Paspalas
President and CEO



The Juanicipio Project

OUR APPROACH

Our Material Topics

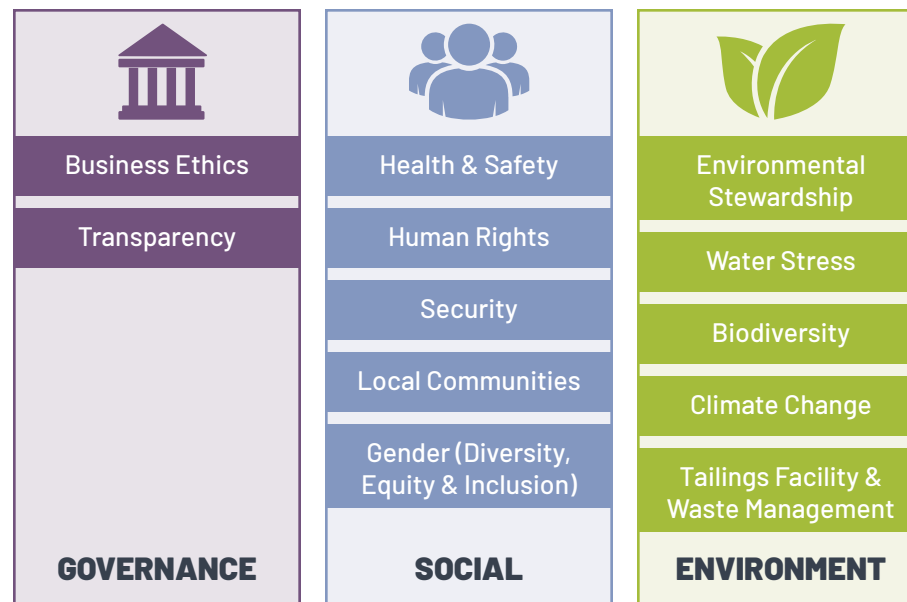
MAG Silver conducted its initial materiality assessment in late 2020 to identify the material ESG topics to address in our public disclosure documents. This multi-step assessment helped us improve our ESG governance and to better appreciate our impacts on the environment and society.

The materiality assessment involved a comprehensive review of our key ESG performance areas, including MAG Silver’s governance practices, strategic plan, health and safety performance, risk assessment and management practices, community engagement and social license activities, regulatory compliance and environmental stewardship. We compared our performance, to industry trends, regulatory developments, global industry standards, United Nations Sustainable Development Goals (“UN SDGs”) and ESG rating criteria against our strategic priorities and in relation to our peers.

This assessment was a collaborative process involving senior management, board members and external consultants. We designed a survey which asked our internal stakeholders to consider and rank sustainability issues in terms of significance and relevance to MAG Silver’s business and potential ESG impacts. Topics were ranked, mapped onto a materiality matrix and grouped into clusters. MAG Silver’s Enterprise Risk Advisory Committee (“ERAC”) reviewed the materiality matrix to confirm that there were no significant gaps in the issues identified through the risk management process. Throughout 2021 and early 2022, the materiality assessment was revisited and validated with information provided by consultants and the sustainability team at the Juanicipio Project; it was further validated with the HSEC Committee of the Board. We plan to conduct external stakeholder consultation to identify and validate material topics for our future sustainability reporting.

The key material ESG aspects identified from this assessment included, but were not limited to, health and safety (including COVID-19), climate change, water stress, environmental stewardship, tailings management, biodiversity, human rights, local communities, gender, security, business ethics and transparency.

COVID-19 is not included as a standalone material topic since its impacts are integrated into many of the topics.



Based on the results of the materiality assessment, MAG Silver implemented its 2021 ESG development plan consisting of a staged approach to strengthen our ESG performance. This was accomplished by increasing public disclosure of our health, safety and environmental performance data, updating policies, developing and enhancing management systems and programs, and continuing to actively engage with employees and community members.

Memberships

MAG Silver engages and supports a variety of organizations at global, national and local levels to help us adhere to high standards of governance, social and environmental performance.

These memberships and voluntary commitments reflect our values, support our approach to working collaboratively with our peers and provide a platform to contribute to industry best practices. Our participation in industry initiatives allows us to stay current regarding emerging sector and sustainability trends, regulatory updates and industry best practices, which collectively advance the mining sector's contribution to sustainable development.

MAG Silver's Memberships



UN Global Compact - MAG Silver became a signatory to the United Nations Global Compact (UNGC) in 2021.



Canadian Chamber of Commerce in Mexico (CANCHAM) - MAG Silver has been a member of CANCHAM since 2014. MAG Silver participates in the Mining Task Force, which is a working committee within the CANCHAM.



The Silver Institute - MAG Silver rejoined the Silver Institute in 2021. MAG Silver participates on the Sustainability Committee.



Utah Mining Association - MAG Silver, through its subsidiary, DT Mining LLC ("DT Mining"), has been a member of the Utah Mining Association since 2020 and participates through the Board of Directors.



Mexican Mining Chamber (CAMIMEX) - MAG Silver has been a member of CAMIMEX since 2012. MAG Silver representatives participate on two committees: the Occupational Health and Safety Commission and the Commission for Government Relations and Legislation.



Utah Safety Council - MAG Silver, through its subsidiary DT Mining, has been a member of the Utah Safety Council since 2020 and engages with the Utah Safety Council through safety programming and resources.

Joining UN Global Compact

In 2021, MAG Silver became a signatory to the United Nations Global Compact (“UNGC”). This formalizes our commitment to implementing the Ten Principles of the UNGC focused on Human Rights, Labour, Environment and Anti-Corruption; driving global sustainable development; and contributing to the UN SDGs. Becoming a signatory was an important part of our desire to continuously improve our performance, manage risks and create opportunities for us to collaborate with, and learn from peers and stakeholders (see Appendix B).

Engaging with UN Global Compact

MAG Silver participates in UN Global Compact Network Canada initiatives. Starting in 2022, we are participating in the Target Gender Equality and the Climate Action accelerator programs. These accelerator programs provide access to peer learning opportunities, facilitated performance analysis, capacity-building workshops and multi-stakeholder dialogues. These programs will help us define a long-term diversity, equity and inclusion strategy as well as enhance our existing climate action strategy.

Mapping the UN Sustainable Development Goals

The UN SDGs are a collection of 17 interlinked global goals designed to be a shared blueprint for peace and prosperity for people and the planet. MAG Silver is working to support progress on the UN SDGs. We recognize that the mining industry has an opportunity and potential to positively contribute to all 17 of the UN SDGs. We consider the UN SDGs when assessing our impacts and in how we measure our performance.

In early 2022, we completed a review and internal assessment to understand MAG Silver’s interaction with the UN SDGs. We developed a self-assessment tool to score MAG Silver’s current performance against expectations of the UN SDGs.



One of the 25 family-size vegetable gardens, Juanicipio Project.

The analysis considered five key criteria:

1. MAG Silver’s values and material ESG topics
2. Contributions of the mining industry to the UN SDGs
3. MAG Silver’s relevant initiatives to support the UN SDGs
4. MAG Silver’s plans and potential to enhance UN SDG outcomes
5. The linkages and connections between the UN SDGs and MAG Silver’s updated material ESG topics.

Although our business has direct and indirect impacts on all 17 SDGs, we have prioritized six UN SDGs which are most closely aligned with our business strategy and where we can have the greatest impact through our activities.

This UN SDG mapping assessment demonstrates that our actions go beyond mitigating negative impacts, to leaving a positive legacy in our host communities.

Safety Training: Juanicipio Project - over 51,400 hours; Deer Trail Project - over 770 hours

At the Juanicipio Project, antigen test campaigns were conducted for employees, contractors and family members and Fresnillo shared COVID-19 tests with the communities neighbouring the Juanicipio Project



The Juanicipio Project team collaborated with the Municipal Agriculture Development Agency to pilot 25 family-size vegetable gardens and 25 backyard poultry farms and provided instruction, training and support to those involved in the pilot projects

The Juanicipio Project team partnered with iBbY Mexico to assist schools in transitioning from in-person reading workshops to virtual reading workshops for kindergarten and primary students in response to COVID-19



MAG Silver completed a TCFD review

84% of the total energy use at the Juanicipio Project came from renewable sources



MAG Silver updated its Diversity, Equity and Inclusion policy

At MAG Silver, 38% of the Board of Directors, 17% of the officers of the Company and 40% of employees are female



61% local employment at the Juanicipio Project; 92% local employment at the Deer Trail Project

The Juanicipio Project collaborated with Fresnillo Municipality to develop capacity building projects that included sewing collectives, jewelry and handicrafts, beauty and barbershop, and carpentry workshops



Water stress risks are included in the MAG Silver's Enterprise Risk Management register and risk assessments

96% of water used at the Juanicipio Project was sourced from the Fresnillo Municipality wastewater treatment facility



GOVERNANCE

Good governance is critical for effective corporate performance and plays a major role in protecting stakeholder interests and maximizing stakeholder value. MAG Silver is committed to complying with applicable laws and regulations in the jurisdictions where we operate. Our policies and procedures generally align with established international industry practices for environmental, social and governance performance.

MAG Silver's Board has established governance guidelines and committees to manage and assist in carrying out many of its responsibilities. Each member of the Audit Committee, Compensation Committee, Governance and Nomination Committee, Technical Committee and Health, Safety, Environment and Community Committee meets the independence requirements established by the (NYSE) New York Stock Exchange American and the (TSX) Toronto Stock Exchange. Seven of our eight Board members are independent.

The MAG Silver Board oversees strategy, governance and risk, and provides guidance on managing risks and opportunities associated with ESG matters and sustainability. Responsibility for managing programs and practices relating to sustainability is delegated by the Board to the CEO and Chief Sustainability Officer ("CSO") with support from our sustainability team. The Board is regularly engaged in sustainability matters and ESG risks through quarterly reports from its Committees and Management.

Board Committees

The **Audit Committee** is responsible for reviewing the Company's financial reporting procedures, internal controls and the performance of the Company's external auditors.

The **Compensation and Human Resources Committee** is responsible for administering the Company's executive compensation program and overseeing incentive and succession plans.

The **Governance and Nomination Committee** is responsible for developing and implementing governance guidelines and principles, providing governance leadership to the Company and monitoring governance programs and policies.

The **Health, Safety, Environment and Community Committee** is responsible for reviewing MAG Silver's sustainability conduct including the Health, Safety, Environment and Social Responsibility Policies, the Human Rights Policy, and for monitoring the Company's practices and performance in these areas.

The **Technical Committee** assists the Board in fulfilling its oversight responsibilities with respect to the Company's operational performance and operating risks from a technical perspective.

MAG Silver's employee compensation at all levels is tied to individual and/or operational performance, the objectives for which are agreed to annually. In 2021, 20% of short-term, performance-based compensation was tied to safety performance, ESG priorities and corporate policies. In 2022, 20% of short-term, performance-based compensation will be tied to safety, climate, social, disclosure and governance objectives. Starting in 2022, part of the long-term performance-based compensation will be tied to safety performance and overall ESG rating improvements.

"This inaugural sustainability report is an important element of our commitment to advancing greater transparency and responsibility within MAG Silver. Over the past two years we have been revising policies and implementing improved standards, systems and protocols to embed effective HSEC management processes across the company and our projects.

I am proud of the progress we have achieved in 2021 and am excited for our continued growth."

– Selma Lussenburg, Chair of HSEC Committee

To support our governance approach, MAG Silver has developed and implemented the following charters and policies:

Charters:

- Board of Directors Mandate
- Audit Committee Charter
- Compensation and Human Resources Committee Charter
- Governance and Nomination Committee Charter
- HSEC Committee Charter
- Technical Committee Charter

Policies:

- Code of Business Conduct and Ethics
- Anti-Bribery and Anti-Corruption Policy
- Whistleblower Protection Policy
- Enterprise Risk Management Framework
- Human Rights Policy
- Diversity, Equity and Inclusion Policy
- Health, Safety, Environment and Social Responsibility Policies
- Executive Compensation Recovery Policy
- Timely Disclosure, Confidentiality and Insider Trading Policy
- Share Ownership Policy

For more information on MAG Silver's Board Committees and Policies, please refer to Appendix C or our website.

Juanicipio Project Committees

MAG Silver holds a 44% interest in the Juanicipio Project, with Fresnillo, the project operator, holding the remaining 56%. The Juanicipio Project is governed by a shareholder's agreement between MAG Silver and Fresnillo. MAG Silver is represented on both the Board of Directors and Technical Committee of the Juanicipio Project. Development and exploration of the Juanicipio Project is carried out by Fresnillo, with MAG Silver participating in all Board of Directors and Technical Committee meetings, as well as regular update meetings when required. The Juanicipio Project Board of Directors and the Technical Committee met twice in 2021.

We have ongoing engagement with Fresnillo to discuss health and safety performance and a Joint Health and Safety Committee is scheduled to be formed in the second half of 2022.



MAG Silver's CEO visits the Juanicipio Project.



MAG employees and families support Canadian charity, Threads of Life – Association for Workplace Tragedy Family Support, through volunteerism and participation at the 2022 fundraising walk.



View from one of the Deer Trail Project's mining claims, south of Deer Trail Mountain.



OPERATION & EXPLORATION

251,907 tonnes

Mineralized Development Material Milled

2,974,524 ounces

(1,305,791 ounces attributable to MAG)

Payable Silver Ounces

5,975 ounces

(2,629 ounces attributable to MAG)

Payable Gold Ounces



Worker viewing the construction of the Juanicipio Project Process Plant

OUR PERFORMANCE



Worker inspecting underground mining equipment, Juanicipio Project.

The Juanicipio Project, located in the Fresnillo Silver Trend in Zacatecas, Mexico, is one of the highest grade and largest primary silver assets in the world and an expanded exploration program is in place targeting multiple highly prospective targets. MAG Silver is also executing multi-phase exploration programs at the Deer Trail 100% earn-in Project in Utah. In 2021, MAG Silver was focussed on the development of the Juanicipio Project and exploration activities at both the Juanicipio and Deer Trail Projects.

Juanicipio Project

The Juanicipio deposit consists of the Valdecañas vein and the Juanicipio vein, which are significant silver-gold epithermal deposits. Development, production and exploration of the Juanicipio Project are all being carried out by the project developer and operator, Fresnillo, with MAG Silver participating in all Juanicipio Board and Technical Committee meetings, as well as ad-hoc meetings when required. Construction and commissioning of the processing plant is under the guidance of an Engineering, Procurement and Construction Management contract entered into with an affiliate of Fresnillo.

In 2021, mine development and commissioning was impacted by COVID-19, causing a number of delays to the schedule. However, underground development of the mine continued to advance, reaching 45 km by the end of 2021. One of the two ventilation shafts for the mine became operational during the year.

COVID-19 delays extended construction of the Juanicipio processing plant by several months and commissioning of the plant, originally anticipated for the fourth quarter of 2021, was also affected as permits to connect the power grid could not be granted on time. As a result, the mill commissioning timeline was extended, awaiting approvals for the final tie-in to the electrical grid.

As planned, mineralized development material was processed at the Fresnillo plants throughout the year minimizing financial disruptions. For the year ended December 31, 2021, a total of 251,907 tonnes of mineralized material from the Juanicipio Project, primarily from underground development, were processed at the nearby Fresnillo plants, resulting in production before production on a 100% basis of 2,974,524 payable silver ounces and 5,975 payable gold ounces.

Exploration Performance

Juanicipio Project

In 2021, the Juanicipio Project exploration program was focused on continued step-out and infill drilling of the Valdecañas Vein. In total, 23 holes were successfully completed, resulting in 29,421 metres drilled. Most intercepts are comparable to previously drilled neighbouring holes with no major deviations either towards higher or lower grades or thicknesses. With the completion of the 2021 drilling program, the intercept density on the Valdecañas Vein Deep Zone is approaching that on the Bonanza Zone and confirms the continuity of mineralization in the Valdecañas Vein to depth.

2021 also saw progress made on permitting three important target areas identified by the exploration team in the underexplored 95% balance of the Juanicipio Project. Notably, permits were obtained in late 2021 to drill the Cesantoni area in the extreme northwest part of the property. Here, a strong northeast-trending structure has been mined for ceramic clays for decades. These clays are alteration products similar to what surround the Valdecañas vein 6 km to the east. Drilling at Cesantoni began in March 2022 and continues to date. Progress was also made in 2021 on permitting targets at Mesa Grande and Triunfo, where structures parallel to the Valdecañas Vein crop out 6 and 12 km farther south. These structures have overall alteration patterns virtually identical to those of Valdecañas.



Surface exploration drilling at the Deer Trail Project.

Deer Trail Project

In 2021, the Deer Trail Project Phase 1 exploration program (three holes, 3,927m, spaced along a 1.5 km long corridor, resulting in 3,927 meters drilled) successfully fulfilled all three of its planned objectives by: (1) confirming the presence of a thick section of more favorable carbonate host rocks (The Redwall Limestone) below the historic Deer Trail Mine; (2) confirming and projecting two suspected mineralization feeder structures to depth; and (3) intercepting high-grade mineralization related to those structures in host rocks below what was historically known.

Security

MAG Silver and Fresnillo face significant security challenges due to the presence of organized crime cartels within Mexico. MAG Silver and Fresnillo face significant security challenges due to the presence of organized crime cartels within Mexico. Fresnillo, along with private security forces, use technology and intelligence to monitor and assess these threats and determine the appropriate responses. Fresnillo constantly conducts internal security risk assessments, integrating the Juanicipio Project into the network of the neighbouring Fresnillo projects. Fresnillo collaborates with Municipal, State and National security forces regarding responses.

Fresnillo has determined that all contracted security services at the Juanicipio Project will remain unarmed to avoid escalation that could endanger the Juanicipio Project workforce (including security services) and community members should violent confrontations with criminal groups occur.

Private security contractors conduct background and reference checks for all employees to ensure candidates do not have criminal records, records of abuse or violations of human rights. Criminal background checks of all Fresnillo employees are conducted during the hiring process with enhanced confidence controls for members of the Juanicipio Project's Security Department.



Access control point at the Juanicipio Project.

The Deer Trail Project has monitoring and surveillance of the project site. Security guards are unarmed.



HEALTH & SAFETY

0

Fatality

Juanicipio Project and Deer Trail Project

5,754,476

Exposure¹ (Hours Worked)

Juanicipio Project

10.08

Lost Time Injury Frequency Rate² (LTIFR)

Juanicipio Project

19.05

Total Reportable Injury Frequency Rate² (TRIFR)

Juanicipio Project

Frequency rates include the Lost Time Injury and Total Reportable medical treatment or first aid cases reported per 1,000,000 hours worked.

1. Hours worked on site from all contractors and full-time employees
2. Employees and mine contractors, excludes construction contractors



H&S Worker inspects the underground mine refuge chamber at the Juanicipio Project

OUR APPROACH: "WE CARE"



H&S Worker inspects the interior of the underground mine refuge chamber at the Juanicipio Project.

***"We maintain focus on what truly matters to MAG:
the health and safety of our employees, contractors
and nearby communities."***

– George Paspalas, President & CEO

We genuinely care about the health, safety and well-being of our people, partners and community members. We believe everyone should go home safe and healthy each and every day, whether from the office or working at one of our projects.

MAG Silver is committed to working toward a culture of zero harm and a workplace free of injuries and occupational illness. We believe that strong leadership and employee engagement, including training, are key to achieving this goal of zero harm.

Our approach to health and safety starts at the top. The HSEC Committee actively engages with management to provide advice, counsel, recommendations and oversight on matters relating to health and safety. Management in turn provides the tools and training necessary to empower our workforce to perform their work safely. Our Health and Safety Policy guides our commitment to recognize the risks and address the hazards, implement the appropriate controls and foster open communications for reporting and resolving unsafe conditions.

OUR PERFORMANCE



Workers following COVID-19 precaution measures at the Juanicipio Project.

The Juanicipio Project reported over 5.75 million hours worked on site in 2021 with zero fatalities and a Total Lost Time Injury Frequency Rate (consolidated for mine contractors and employees) of 10.08 (injuries per 1 million hours worked). The Total Reportable Frequency Rate for 2021 (consolidated for mine contractors and employees) was 19.05.

Juanicipio Project Employee and Contractor Exposure:

Year	Exposure ¹ (Hours Worked)
2021	5,754,476
2020	2,779,424
2019	1,930,656

*Hours worked on Juanicipio Project site for all contractors and full-time employees

Juanicipio Project Employee Safety Performance:

(Excluding construction contractors as reported by Fresnillo)

Year	Fatality	LTIFR	TRIFR
2021	0	10.08	19.05
2020	0	9.45	26.37
2019	0	4.14	14.8

Frequency rates include the Lost Time Injury and Total Reportable medical treatment or first aid cases reported per 1,000,000 hours worked, LTIFR - Lost Time Injury Frequency Rate, TRIFR - Total Reportable Injury Frequency Rate.

Deer Trail Project Contractor Safety Performance:

Year	Fatality	LTIFR	TRIFR	Exposure ¹ (Hours Worked)
2021	0	0.0	0.0	29,211
2020	0	0.0	0.0	17,270
2019	0	0.0	0.0	7,299 ²

1 - Hours worked on Deer Trail Project site for full-time and part-time contractors.

2 - From September to December 2019.

In 2021, over 29,000 hours were worked at the Deer Trail Project over an average of 13 people. There were no employee or contractor fatalities, lost-time injuries or reportable incidents.

'I Care, We Care': Our Safety Culture

At the Juanicipio Project, the 'I Care, We Care' safety management system has been fully adopted and implementation is ongoing. The system's elements identify the most critical risks or risks with the greatest potential to harm individuals and, with collaboration from managers, supervisors, operators and contractors, implements the controls required to mitigate those risks. The system focuses on evaluating safety performance and monitors the progress of reducing High Potential Incidents and unsafe conditions in the workplace.

Ongoing implementation of the safety management system also includes progress on aligning documentation to ISO 45001 Occupational Health and

Safety Management System requirements. A formal certification of the system is not contemplated for 2022.

At the Deer Trail Project, risk awareness and emergency preparedness have been key focal points in the proactive safety programs that all employees follow. Workers participate in daily discussions with colleagues and supervisors to ensure risks and hazards are understood and controls are in place. Additional components of the program include job hazard analyses, field-level risk assessments and risk scenario planning exercises. Workers are empowered to stop work if unsafe work practices or hazards are identified.



'I Care, We Care'

LEADERSHIP

Safety Leadership Support by Core Values

COMMITMENTS & ACCOUNTABILITY

Integrating Safety Systems
with Operational Management

RISK COMPETENCIES & BEHAVIOUR

A mature resilient safety culture

RISK COMPETENCY SYSTEMS

Establish Risk Management Systems

CONTINUOUS IMPROVEMENT

Risk reduction through engineering, systems,
behaviours and lessons learned

Hazard Identification and Risk Assessment

Hazard identification and risk assessment are the foundational steps of a proactive process to minimize the risks associated with health and safety hazards in our workplaces. This systematic process involves the identification of hazards, assessment of the risks, implementation of controls and the ongoing monitoring and review of all safety measures. Risk assessments are undertaken for new work procedures, unplanned activities and the introduction of new hazards, and also can be incorporated into incident analyses.



Simulation of a first aid emergency at the Deer Trail Project.



Emergency preparedness scenario training at the Deer Trail Project.

Emergency Preparedness

Risk awareness and emergency preparedness have been focal points in the Safety programs at the Juanicipio and Deer Trail Projects. At each project, emergency preparedness and response plans are in place that outline the essential procedures and preventive measures for effective and timely response and management of an emergency. In addition, MAG Silver has established a crisis management team at the corporate level to support emergency response teams established at each project.



Worker training on mining equipment simulators at the Juanicipio Project.

Training

Proper health and safety training extends far beyond the induction and orientation of a new employee or contractor. Ongoing and regular health and safety training is vitally important to encompass the hazards presented across all aspects of our business.

At the Juanicipio Project, more than 51,400 hours were dedicated to safety training in 2021. Employees and contractors received specialized safety training through safety inductions and refreshers (35% of safety training hours), understanding safety system elements, hazard identification, and risk analysis techniques (15%) and extensive training and review of the project-specific Critical Risk Control Protocols (50%).

At the Deer Trail Project, safety training in 2021 included mine rescue training with support on three occasions from other nearby mining operations. Staff and contractors also received training to improve workplace safety inspections, hazard identification and risk mitigation techniques, and they participated in monthly risk scenario planning exercises. Additionally, the team partnered with local medical services to receive training in emergency response techniques. A total of 770 hours, or approximately 2.6% of total hours worked in 2021, were dedicated to safety training and risk awareness.

“To achieve our health and safety commitments, MAG will provide team members with the necessary training, guidance, direction and knowledge to safely perform their tasks.”

– MAG Silver Health and Safety Policy

COVID-19 Safety Protocols and Response

Corporate Office: In 2020 and throughout 2021, MAG Silver implemented COVID-19 Safe Work Procedures that have been updated to reflect the changing COVID-19 variants, conditions and health recommendations. All MAG employees are fully vaccinated. Our corporate office has adopted a hybrid work model and the majority of management and Board meetings have been held virtually.

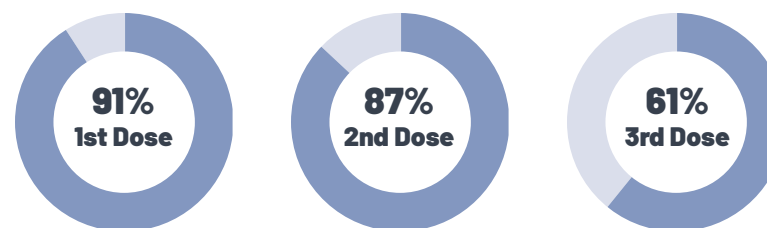
Juanicipio Project: Fresnillo, as operator of the Juanicipio Project, continues to closely monitor the spread of the COVID-19 virus. Working closely with Mexican authorities and peers, Fresnillo developed a preventative protocol based on international best practices in accordance with the World Health Organization. Some of the measures implemented include stringent monitoring and hygiene practices, mandatory mask use, temperature screening and social distancing. Testing campaigns (PCR, Antigen and Antibody) of workers and contact tracing have been used to identify potential cases and prevent the spread of the virus. Testing campaigns were also conducted for family members of Juanicipio Project workers. Fresnillo provided its workforce with transportation to and from vaccination sites, medication for side effects and time off to recover from the vaccination, if required.

These protocols were maintained, and a COVID-19 Crisis Committee was formed with representatives from various operational and administrative business units. Government entities have inspected the workplace and the Juanicipio Project is certified by the Mexican Social Security Institute for the implementation of protocols to prevent the spread of COVID-19.

Juanicipio Project COVID-19 Testing				
Cases Identified	Antibody Tests	Antigen Tests	PCR Tests	Total Tests
611*	3,599	3,650	15,598	22,847

*COVID-19 data is for the period June 16, 2020 to December 31, 2021.

Juanicipio Workforce Vaccination Numbers



COVID-19 vaccination data is for the period January 1 to June 30, 2022.

Deer Trail Project: In response to the COVID-19 pandemic and following discussions with the Utah Center for Disease Control, MAG Silver established COVID-19 Protocols for the Deer Trail Project in 2020. This Protocol was updated throughout 2021 to reflect the changing coronavirus variants, conditions and health recommendations. COVID-19 safety measures employed at the Deer Trail Project include education, testing, stringent monitoring and hygiene practices, mandatory mask use, temperature screening and social distancing. To support vaccination efforts at the Deer Trail Project, workers were given paid time off to get vaccinated and recover, if necessary. The Deer Trail Project also had an economic support plan for sick workers that included full and partial pay for sick days. In 2021, 69% of the workforce at the Deer Trail Project were vaccinated.

Additional information on COVID-19 can be found in the “Our Community” section.



Underground workers at the Juancipio Project



OUR PEOPLE

2,929 People

Total workforce (Juanicipio Project)

61% Local¹

(State of Zacatecas)

Juanicipio Project

92% Local¹

(State of Utah)

Deer Trail Project

40% Women

MAG Silver employees

87,824 Training Hours

(51,400 safety training hours for Juanicipio
Project personnel and construction workers)

Juanicipio Project

13% Turnover at Juanicipio Project

7% Turnover at Deer Trail Project

¹ - Juanicipio Project (Fresnillo employees): 8.6% women
Deer Trail workforce: 31% women



Female workers at the Juanicipio Project

OUR APPROACH

MAG Silver is committed to the highest standards of ethics and business conduct, creating safe, inclusive and diverse workplaces. Our due diligence and risk assessment processes, principles, policies and procedures are aligned with the United Nations Guiding Principles on Business and Human Rights, the International Labour Organization's Declaration on Fundamental Principles and Rights at Work, and are supported by our Code of Business Conduct and Ethics, Human Rights Policy and Diversity, Equity and Inclusion Policy.

We believe a diverse workforce creates opportunities for innovation and delivers positive results through improved performance and effective decision making. While our opportunities for employment and advancement are primarily based on performance, competence and merit, we consider diversity in all aspects of employment and engagement, including recruitment, hiring, promotion, compensation, training and professional development.

"MAG Silver is committed to creating and supporting an inclusive, equitable and diverse workplace that recognizes and values differences, where everyone is treated fairly and with respect, and where all employees have equal opportunity to succeed."

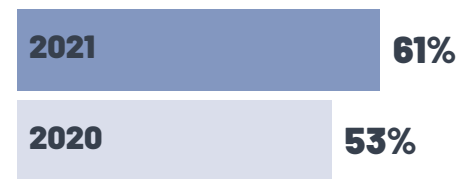
- MAG Silver Diversity, Equity and Inclusion Policy

OUR PERFORMANCE

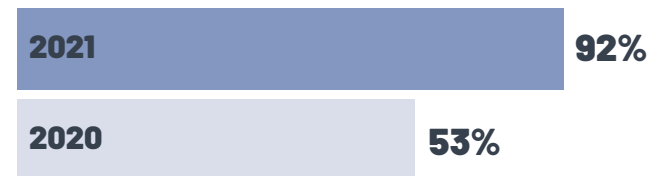
Local Employment

We make it a priority to maximize local employment so that the economic and social benefits remain within our communities of interest, therefore, our recruitment practices prioritize hiring people from the local communities. In addition to local employment, we focus on capacity building in our communities of interest. In 2021, 177 local people were recruited to work at the Juanicipio Project.

Local Employment at the Juanicipio Project



Local Employment at the Deer Trail Project



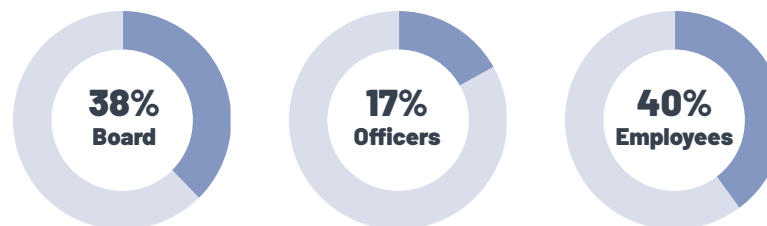


Worker training on underground mining equipment simulators at the Juanicipio Project.

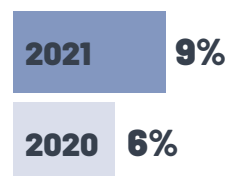
Women in the Workforce

We are committed to fostering and cultivating a diverse, equitable and inclusive work culture. We will be participating in the United Nations Global Compact – Target Gender Equality Accelerator Program in 2022. Through facilitated performance analysis, capacity building workshops, peer-to-peer learning and multi-stakeholder dialogue, the program will help MAG have a deeper understanding of our gender equality performance and set corporate targets for women’s representation and leadership.

2021 MAG Silver’s Female Workforce



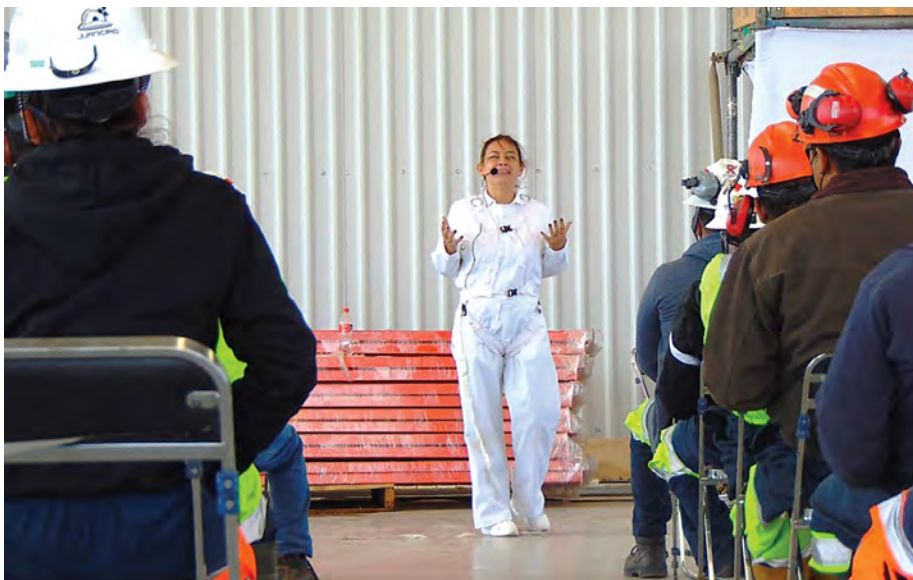
Female Workforce at the Juanicipio Project



Female Workforce at the Deer Trail Project



Fresnillo, the operator of the Juanicipio Project, has a corporate goal to increase the representation of women from 10% to 12% by 2025 and increase the percentage of women in managerial and superintendent roles from 2% to 8%. This commitment is reflected at the Juanicipio Project through their efforts to attract and retain women in the workforce.



Safety Day provided another opportunity for guest speaker presentations at the Juancipio Project.

Turnover

With a headcount of 10 people, turnover at MAG Silver corporate office is low. In 2021, no employees voluntarily or involuntarily left MAG Silver, the labour turnover was 0%.

At the Juancipio Project, Fresnillo employee turnover in 2021 was 13%. At the Deer Trail Project, turnover in 2021 was low at 7%.

2021 Juancipio People Data	Men	Women	Total
Construction (Surface)	1,403	127 (8%)	1,530
Unionized	136	41 (23%)	177
Non-unionized	96	20 (17%)	116
Contractors	1,042	64 (6%)	1,106
Employees Total	232	61 (21%)	293
Workforce Total	2,677	252 (9%)	2,929

“MAG Silver is committed to promoting a culture of respect for human rights and inclusion that aligns with the United Nations Guiding Principles on Business and Human Rights, the International Labor Organization’s Declaration on Fundamental Principles and Rights at Work, international humanitarian law and applicable local human rights legislation.”

– MAG Silver Human Rights Policy

Training

Training and education of our employees is a priority for MAG Silver. We have training programs in place to support professional development and to ensure that employees have the knowledge and skills to fulfill their roles and responsibilities safely and efficiently. MAG Silver's corporate office conducts annual training in corporate policies in addition to supporting employee's professional development whether through attending seminars and conferences or taking courses.

At the Deer Trail Project, training topics in 2021 included: health (COVID-19 prevention and mitigation), safety inductions, safety risk scenario exercises, incident reporting, behaviour risk competencies, critical risk control standards, MSHA surface and underground courses, job safety analyses, grievance mechanism and community engagement.



TRAINING CENTRE

In 2022 a new health and safety training centre at the Juanicipio Project will be opened. The centre will prepare, assess and certify the workforce and contractors in critical control management to mitigate risks and prevent accidents.

The centre will have:

1. Lecture hall for theoretical or desk-based training.
2. Area for mine rescue training and practice.
3. Dedicated training area for light vehicles and mobile equipment, including specialized trucks used in underground mining operations and buses for transporting personnel. Internal Juanicipio Project licenses will be issued once competencies, protocols and trainings are completed and certified.
4. Instruction on the critical risk safety module protocols.



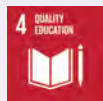
With the support of the University of Arizona, Fresno provided online training in Diversity, Equity and Inclusion for the Juanicipio Project executives, managers and other selected employees. This training focused on unconscious bias, microaggressions, sexism and discrimination, as well as strategies to increase inclusion. Harassment prevention training was provided to 60 employees in 2021 and the Juanicipio Project will continue rolling out training to unionized workers and contractors in 2022. Training was also provided for all employees on the Step-Up Culture framework.

Ethics through Empowerment

The Step-Up Culture Program is an evidence-based, practical approach that promotes the winning behaviors of transformational leadership, behaving ethically, building trust, and leveraging diversity within the workforce. This program aims to engage the workforce so they feel empowered to speak up when faced with ethical dilemmas and ultimately become their own stewards of ethics culture.

The framework is in use at the Juanicipio Project and encourages people to focus on four key elements and the winning behaviours that demonstrate those elements:

1. **Build trust:** We encourage people to create a culture of candor, be accountable, find solutions to their ethical dilemmas, and have the courage to implement them.
2. **Transformative leadership:** We expect our people to be role models, to be empathetic, to stimulate creativity, and to be an inspiration for their team.
3. **Act ethically:** Every employee should support others speaking up, raise ethical concerns, and make correct decisions.
4. **Leverage diversity:** We encourage our people to embrace diversity, to learn how to deal with and minimize unconscious biases, and to challenge the existing organizational culture.



Fresno provided training and direction to the Juanicipio Project on their Step-Up Culture program.

Labour Relations

We respect workers' rights related to working conditions, freedom of peaceful assembly and association, freedom of speech and the elimination of discrimination in respect of employment and occupation. We have zero-tolerance for the use of forced, compulsory or child labour.

Currently, 65% of Fresnillo's employees at the Juanicipio Project are unionized; most of the balance are salaried professionals. The Juanicipio Project works together with the union to promote a number of key operational aspects such as safety, productivity and harassment prevention.

Given the seasonal nature of the exploration activities at the Deer Trail Project, the small workforce is provided by local contractor companies. In 2021, the exploration program employed a total of 13 people during the season. The workforce was provided training and professional development support as needed.

MAG Silver's corporate office has adopted a hybrid approach of working from home and from the office. We implemented several initiatives to provide our employees the tools and support to succeed in their new ways of working. Initiatives included: reimbursements for equipment for home offices, virtual social events, instruction on videoconferencing technology and options for flexible work scheduling.

Labour Grievances and Disputes

At the Juanicipio Project, we maintain a formal worker grievance procedure. Employees are encouraged to approach their manager or human resources representative and if concerns cannot be resolved, the grievance is escalated. Unionized employees at the Juanicipio Project may report their grievances through their respective union representative. All grievances are reviewed, categorized and responded to.

The "Deer is Listening" is the name of our worker feedback and grievance mechanism through which the workforce at the Deer Trail Project can communicate their concerns, provide feedback or raise grievances with the company.

The grievance procedures at each Project site complement the MAG Silver and Fresnillo Whistleblowing Policies. Each company has third-party managed hotlines which can be used by anyone to raise concerns, anonymously or in confidence, about MAG Silver's or Fresnillo's activities. MAG Silver received zero whistleblower reports in 2021 and 2020. Fresnillo received 11 whistleblower reports for the Juanicipio Project in 2021. All reports have been resolved, with no outstanding cases at the end of the year.



The newly constructed training centre at the Juanicipio Project. The artist murals are based on employee artwork.



OUR COMMUNITIES

293 Beneficiaries

Capacity Building

280 Beneficiaries

Productive Projects

1,144 Beneficiaries

Education Projects

144 Beneficiaries

Health Projects

12

Community Grievances



One of the 25 backyard poultry farms established as part of a pilot program developed in partnership with the Municipal Agriculture Development Agency, Juanicipio Project.

OUR APPROACH

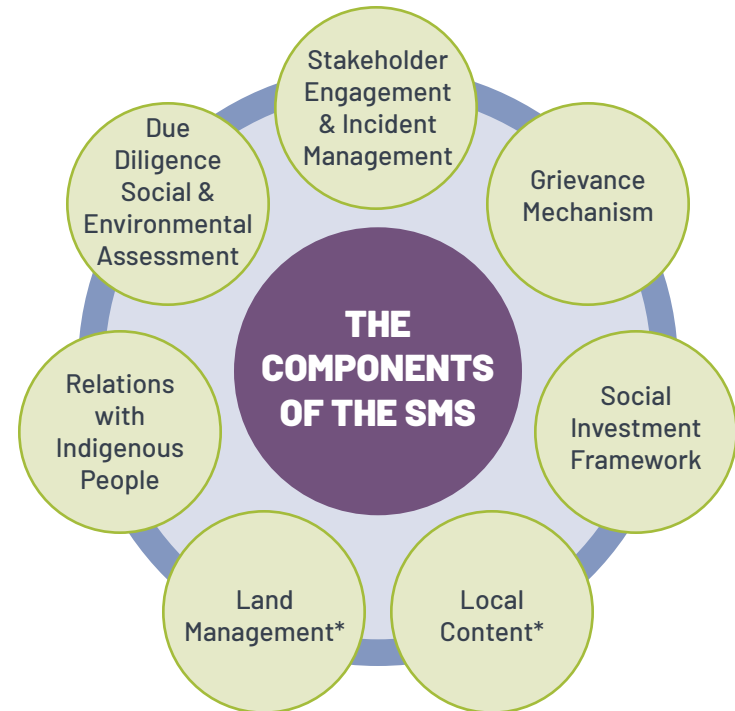
MAG Silver is committed to building trust and respect, addressing concerns and making a positive difference in the communities in which we live and work. Our Social Responsibility and Human Rights policies provide the foundation for our approach to social and economic development through sustainable projects and initiatives. Working with our communities, we identify projects and opportunities.

Social Management System

We have developed a Social Management System (“SMS”) to guide, monitor and measure our social performance. The SMS was developed to ensure that we manage our impacts, engage honestly and transparently, and collaborate with people and communities where we have projects.

The foundation tools listed below support the SMS as illustrated in the following graphic.

- Our Vision, Mission, Values and Behaviour statements
- Governance Practices, Charters and Corporate Policies
- Materiality Assessments
- Stakeholder Identification and Mapping tools
- Emergency Preparedness and Crisis Management Plans
- Enterprise Risk Management Framework



*Components in design and development

OUR PERFORMANCE

Engagement

Early planning and engagement are critical to the success of a project. Local stakeholder identification, stakeholder mapping, community mapping and grievance mechanisms are tools used for community engagement at MAG Silver's projects. Formal and informal meetings provide the platform for two-way information sharing and for working together to identify opportunities for collaboration.

As the operator of the Juanicipio Project and of its wholly owned Saucito and Fresnillo mines, Fresnillo takes a district approach to community relations in the area. The community relations team at the Juanicipio Project often work in concert with their colleagues at the established Saucito and Fresnillo mines.

The Juanicipio Project community relations team regularly meets with local stakeholder groups to foster an open, transparent and respectful relationship while understanding the needs and priorities of our key stakeholders. The team works with communities to develop a purposeful social investment portfolio and, when possible, partners with civil society organizations to build capacity in the communities around Juanicipio. The Juanicipio Project, through the Directorate of Economic and Agricultural Development, has two signed agreements with the Fresnillo City Council for the development of microenterprises or other productive projects. The agreements state the contributions from each party: 40% Fresnillo City Council and 60% Juanicipio Project. The community development plan covers microenterprise projects in the communities of interest closest to the Juanicipio Project (Presa de Linares, Mexico Nuevo, El Obligado and Carillo).



Representatives at the signing of the two agreements with the Fresnillo City Council, Juanicipio Project

The Deer Trail Project takes an organic approach to community relations, focusing on providing information to the community to open two-way communication and community collaboration. We regularly meet with key stakeholders to build a mutual understanding of impacts and benefits between our project and the local communities. Our community engagement approach is tailored to the project being in the exploration phase of the mine life cycle.

Relationships with Indigenous Peoples

In 2021, MAG Silver updated its Human Rights and Social Responsibility policies to include our commitment to engagement with Indigenous Peoples. Our Human Rights Policy states that we will respect “the history, culture and traditional ways of Indigenous Peoples, their standing as distinct, self-determining peoples, and their interests in land, waters and the environment”. Further, our Social Responsibility Policy states our commitment to “engage through meaningful dialogue and cooperation with Indigenous communities by seeking to fully inform and receive input on the likely impacts and opportunities arising from the Company’s activities, including during social and environmental impact assessments of new projects.”

Community Development

We have a shared-value approach to community investment that focuses on local development activities to promote sustainable and lasting economic and social benefits.

In 2021, MAG Silver expanded our SMS by introducing a social investment framework to the Deer Trail Project. The social investment framework emphasizes collaboration with local communities and provides support through volunteerism, donations, sponsorships and development programs and projects.

MAG Silver’s community investments fall into the following priority areas:

Area of Focus	
<p>Socio-Economic Development</p>  	<p>Programs that support people through training and education to strengthen access to education and complement formal education programs in the communities in which we operate.</p> <p>Programs that promote initiatives related to local business development, entrepreneurship and empowerment.</p>
<p>Public Health & Safety</p>  	<p>Programs that promote a culture of safety, and improve emergency preparedness and emergency prevention initiatives.</p> <p>Programs that foster active and healthy lifestyles for members of the community.</p> <p>Programs that support greater access to health services.</p>
<p>Natural & Cultural Heritage</p> 	<p>Heritage investments that create awareness and foster an understanding of cultural heritage of local communities.</p> <p>Programs that promote environmental stewardship, the research and protection of species and the natural environment in the areas we operate.</p>

Juanicipio Project

During 2021, at the Juanicipio Project, numerous community projects were implemented encompassing the areas of education, health, capacity building and microenterprise projects.

We continued our focus on supporting local entrepreneurs through capacity building and productive projects.



Starting from the top and moving clockwise: education programs in local schools; breast cancer awareness & mammogram clinic; backyard chicken project; family garden project; carpentry training workshops; sewing workshops

Centre photo: The Juanicipio Project

Capacity Building

The capacity building projects involve direct collaboration with the municipality on productive ventures that include the formation of new microenterprises. In 2021, capacity building projects included sewing, handicrafts, bakery, barbershop, jewelry, handicraft and carpentry workshops.

Further community assessments are being carried out in 2022 to identify entrepreneurs that meet the microenterprise development project criteria.

“We started the workshop eager to learn a new skill. We never imagined that it would become a business opportunity for us.”

*– Margarita Pitones,
sewing workshop participant
from the Juanicipio Project.*



The women’s sewing collective is one of the successful microenterprise projects that was developed through the agreements between the Juanicipio Project and the Fresnillo City Council and their Directorates of Economic and Agricultural Development. Fresnillo, in alliance with the ProEmpleo Foundation provided entrepreneurial training to a group of women from the community of El Obligado who wanted to create a sewing collective.

A need for fabric face masks was identified at the start of the COVID-19 pandemic and the sewing collective responded by making masks for health institutions, governments and Juanicipio’s workforce. The sewing collective has expanded their product catalogue to also include industrial vests, aprons, school uniforms and sports uniforms. In 2021, the sewing collective gained the necessary approval to become an official supplier for Fresnillo plc and Industrias Peñoles. The project is self-sustaining.



FROM WASTE TO WOODWORKING



The Juanicipio Project supported a two-stage carpentry project to recover and reuse wooden packaging. 120 tonnes of scrap wood were made available to local community members and used in carpentry projects in 5 communities surrounding the Juanicipio Project. As well, wood was used in workshops to make furniture for community spaces. The project began with 7 community participants and has grown to the manufacture of a wide range of furniture including benches and tables for classrooms, a closet for the local church and clinical beds for the elderly.



Productive Projects

Working with the Municipal Agriculture Development Agency, the Juanicipio Project team collaborated with the communities of Mexico Nuevo and Carillo to pilot 25 family-size vegetable gardens and 25 backyard poultry farms. The project benefited over 250 people and there are plans to expand it in 2022. Families were given seeds to plant vegetables, materials to build greenhouses and received instruction and support to grow their own vegetables. The families that piloted the backyard poultry farms were supplied with chickens, feed and materials to build chicken coops and feeders. They also received instruction and support on how to raise chickens and how manage the chickens' health. These projects aim to improve nutrition and help develop the community's food generating capacity.

Additional community projects in 2021 included a nopal cactus forage project (for livestock feed) and a community clean-up and reforestation project.

"I feel very good learning about carpentry. We are carrying out projects for the church such as a closet, benches and some chairs."

- Member of Nuevo Mexico Community

Educational Projects

Education was another priority area identified by communities. Since the beginning of the COVID-19 pandemic schools were closed and the Juanicipio Project worked with educators to promote virtual learning opportunities. In the community of Presa de Linares, the Juanicipio Project team supported the efforts of a non-profit organization affiliated with the International Board on Books for Young People (iBbY Mexico) to transition from in-person reading workshops to virtual reading workshops for kindergarten and primary students. The program benefited 125 students. The publishing company, Éditions Larousse, donated books to compliment the workshops.

Infrastructure projects included classroom improvements for primary students and multi-purpose recreational courts. This was made possible with funding from the Juanicipio Project and resources from the Mexican Federal Government program, "The School is Ours."



When schools were ready to be reopened for in-person classes, the Juanicipio Project collaborated with the local communities of Presa de Linares, El Obligado, Carrillo and Mexico Nuevo, to support a "Safe Return to Schools" program. The program provided schools with hygiene and sanitation supplies, including masks for children. In addition to helping schools with their COVID-19 procedures, the program connected child psychologists with schools to survey teachers and families to understand perceptions around children returning to school. A key aspect of the program was to encourage and support the school director and to build trust with the teachers and parents. The "Safe Return to Schools" program benefited more than 700 students and teachers.



Photo Credits:

Left: <https://arzatnoticias.com/index.php/2021/12/10/apoya-fresnillo-plc-a-escuelas-de-nivel-basico-en-tres-comunidades/>

Right: <https://outletminero.org/minera-juanicipio-apoya-con-infraestructura-educativa-a-comunidad-mexico-nuevo/>



Workers at the Juanicipio Project have access to health care including annual health checks.

Health Projects

Rapid testing for COVID-19 was neither affordable nor easily accessible for community members. The community relations team at the Juanicipio Project collaborated with their local communities to provide rapid tests, medical supplies and medical equipment to the clinics and Municipality of Fresnillo. The Juanicipio Project also donated food, masks and antibacterial gels to vulnerable people. Fresnillo assisted state vaccination efforts by providing facilities for vaccination clinics and transport for Juanicipio Project workers to and from the clinics. Fresnillo maintains an open dialogue with government officials at both the federal and local levels.

In the communities of Presa de Linares, El Obligado, Nuevo Mexico and Carillo, the community relations team partnered with local health authorities to support a breast cancer mammogram screening program. Forty-one mammography students participated and 103 women were screened.

Economic Impact:

We generate a positive economic impact in the countries, regions and communities where we operate through tax payments, local hiring, local procurement and community investments.

We disclose on an annual basis payments made to all governments including taxes and royalties. MAG Silver does not make political donations or contributions. We strongly support the elimination of bribery and corruption by disclosing our payments to government in accordance with the Canadian Extractive Sector Transparency Measures Act ("ESTMA"). Our ESTMA reports can be accessed on our website.

Juanicipio Project - Economic Impact (US\$M)	2020	2021
Payments to suppliers (contractors)	60.5	157.1
Wages and benefits to workers	0	1.6
Payments to Local governments	0.2	0.2
Payment to Federal governments	0	3.7
Total Economic impact	60.7	162.5

Local employment and local procurement are a priority at the Juanicipio Project and significant effort, including training, is made to purchase goods and services from local suppliers to increase the socio-economic ripple effects that extend into the local communities and the greater state of Zacatecas.

In 2021, the Deer Trail Project provided US\$0.9M in wages to workers. In the same year, the Deer Trail Project also paid US\$2.2M to the drilling contractor and US\$1.4M for purchasing of drilling related supplies and procurement. In 2021, US\$0.2M was paid to local and federal governments for property taxes and mining claim fees.

Community Concerns

Community Grievance Mechanism

All our projects have implemented feedback mechanisms for local community members to use, which helps us understand our impacts on the communities. These are supported by MAG Silver's Social Responsibility and Human Rights Policies. The community relations teams at our projects solicit feedback from people in the community based on current or proposed activities and on identifying and resolving issues. Feedback is received through phone calls, emails, individual meetings, public or community liaison meetings or confidential whistleblower hotlines, which are then logged in our databases. Multiple feedback channels allow our stakeholders to communicate with us in a way that is inclusive and accessible.

All complaints received are acknowledged, assessed and a response is communicated to the complainant. The community relations teams aim to respond to and resolve complaints promptly. In 2021, the Juanicipio Project received 12 community grievances (15 in 2020). 83% of grievances received in 2021 were closed by year end.

Juanicipio Project – Community Grievances	2020	2021
Outstanding grievances from previous periods	2	4
New grievances received in the period	13	8
Total grievances	15	12
Closed grievances in the period	11	10
Outstanding grievances at the end of the period	4	2

There was one community grievance received for the Deer Trail Project in 2021 regarding a damaged water pipe. Repairs were made when weather conditions permitted and the matter was resolved. There were no community grievances in 2020.

“MAG will establish formal grievance and dispute resolution mechanisms as part of our overall community engagement process.”

– MAG Silver Social Responsibility Policy



ENVIRONMENTAL STEWARDSHIP

Juanicipio Project¹

Working toward ISO 14001 EMS certification

334,465 GJ

Total Energy Use

Total Project²: 20,050 tCO₂e

Scope 1: 18,307 tCO₂e / Scope 2: 1,743 tCO₂e

GHG Emissions

84%

Renewable Energy Use Ratio

Freshwater use³: 7,000 m³

164,000 m³ from Fresnillo municipality wastewater

Water Stewardship

Tailings Storage Facility (TSF)⁴

Under Construction



1 – Total GHG emissions (on a 100% basis) from the Juanicipio Project are presented. MAG Silver holds a 44% equity share of the Juanicipio Project. In 2021, the Juanicipio Project's power was supplied by the neighboring Saucito Mine, which benefits a power purchase agreement with Coahuila Wind Farm (renewable power ratio 86%); 2 – Scopes 1 (fuel) and 2 (power) GHG emissions from MAG's exploration projects are not material (<2% of Juanicipio total GHG emissions); 3 – On a 100% basis, the Juanicipio Project sourced approximately 7,000 m³ (3%) of freshwater and approximately 164,000 m³ (97%) of treated wastewater from the municipality of Fresnillo; 4 – Mineralized development material processed at the nearby Fresnillo Mine Processing Plant and related tailings sent to Fresnillo Mine TSF (see also TSF section in this report).

Nopal cactus were one of the species that were transplanted as part of the reforestation program

OUR APPROACH



Juanicipio Project environmental team conducting reforestation activities.

We are committed to wise environmental stewardship, including climate action, water management and biodiversity. We care about protecting the environment for future generations while providing safe, responsible and profitable projects by developing natural resources for the benefit of our stakeholders. To meet this commitment, we strive to protect the environment by requiring that projects, at a minimum, meet local environmental regulations and standards, and where applicable, international standards.

As with Health and Safety, our approach to the environment starts at the top with leadership, commitment and oversight from the Board of Directors and Management. Our environmental stewardship strategy is embedded in our Environmental Policy and Standards and we are focussed on providing our workforce with the tools and training needed to enable them to perform their work. All sites have activities to develop capacity through ongoing training, professional development programs and coaching in the field.

The Environmental Management and Monitoring Program at the Juanicipio Project is designed by the project operator Fresnillo to promote a culture based on preventing, minimizing and mitigating environmental impacts to land, air, biodiversity and water from our activities. Annual reporting of the management plan is made to state regulators.

Our operations are aligned with the Paris Climate Agreement. We use the recommendations of the Task Force for Climate-Related Financial Disclosure ("TCFD") to benchmark MAG Silver's governance, strategy, risk management and future target setting. The GHG data from the Juanicipio Project, and the projected "Business as Usual" GHG profiles are reported in the Fresnillo Annual Report and are presented here as a basis for exploring feasible decarbonization pathways for 2023 and beyond.

OUR PERFORMANCE

Climate Action

MAG Silver's ongoing analysis of ESG matters continues to highlight the importance of understanding climate-related risks and opportunities (CROs) in the mining sector and our projects. In 2021, we benchmarked current performance to the recommendations of the TCFD to evaluate how CROs may affect our projects, and to identify intervention opportunities to consider how to further strengthen our climate-governance practices and address key transition and physical risks. The development of a climate change management plan continues in 2022 and planned disclosures will align with the TCFD recommendations. Physical climate change risks are included in our risk register and are reviewed regularly by the Enterprise Risk Advisory Committee ("ERAC") and reported to the Board. The Board has established a Technical Committee which, in conjunction with the HSEC Committee, reviews technical aspects of safety and environmental risks, specifically climate change impacts and tailings management.



The Juanicipio Project will be connected to the grid in 2022.

"MAG Silver supports the principles of the Paris Agreement to strengthen global response to the threat of climate change. We completed a TCFD review and will be reviewing our climate-related risks and opportunities at Juanicipio in collaboration with Fresnillo".

- Jim Mallory, Chief Sustainability Officer, MAG Silver



Regular maintenance of the mining fleet is part of the energy efficiency program at the Juanicipio Project.

Energy Use and GHG Emissions

The Juanicipio Project benefits from the progressive climate policies and practices of its operator, Fresnillo, which is already deriving 50% of its total electricity consumption for its operations from renewable sources (it is their goal to reach 75% by 2030) as reported in their own TCFD review.

In 2021, the Juanicipio Project was not yet operational and remained connected to Fresnillo's neighbouring Saucito Mine, which derived 84% of its electric consumption from renewable sources (Coahuila Wind Farm). Mineralized development material from the Juanicipio Project was trucked to both the neighbouring Saucito and Fresnillo plants for processing. The Fresnillo Mine also draws electricity from renewable sources (Coahuila Wind Farm).

GHG emissions (Scope 1 and 2) at the Juanicipio Project are tracked and assessed to identify opportunities to improve efficiencies, reduce GHG emissions and promote the use of renewable energy. In addition, Fresnillo has evaluated decarbonization opportunities for its portfolio of operations and projects (including the Juanicipio Project) through to 2030.

The growth of all renewable energy sources relies on a regulatory framework that provides long-term certainty. Proposed changes to the Mexican electricity industry to curtail renewables may reduce the options for decarbonisation of the Juanicipio Project and increase the cost of energy. Fresnillo continues to engage with regulators and law makers on energy and climate change regulations both directly and through industry associations.

MAG Silver's corporate office in Vancouver occupies approximately three quarters of a floor in a BOMA Best Gold certified office building. The impact on the environment of our workforce of 10 employees is small. During 2021, corporate travel was extremely limited, and most employees worked from home with little or no commuting to work, resulting in reduced carbon emissions compared to previous years. We have a robust composting and recycling program in our corporate office that employees use.



Aerial photo of the Juanicipio Project.

Biodiversity

Juanicipio Project

Mexico is distinguished as one of the world's megadiverse countries and is an origin of plant domestication and cultivation. Mexico adopted its first National Biodiversity Strategy and Action Plan (NBSAP) in 2000. The implementation of NBSAP contributed to increasing the level of biodiversity knowledge, including status and threats, institutional capacity and social awareness. The NBSAP highlights the following key pressures to biodiversity: ecosystem degradation and loss; overexploitation of species; introduction of invasive species; pollution; climate change; and urbanization.

Fresnillo, the operator of the Juanicipio Project, assessed the potential impact to biodiversity while conducting an environmental impact assessment ("EIA"). The EIA confirmed that the Juanicipio Project is not located in a Mexican Natural Protected Area, UNESCO Natural World Heritage site, UNESCO Man and Biosphere Reserve, Ramsar Wetland of International Importance or IUCN Protected Area. The EIA also identified opportunities to manage and enhance and address many issues such as surface and groundwater resources, water quality, air quality, soils, biodiversity (including threatened or endangered species), landscape, and socioeconomic conditions. The insights gained from the EIAs form the foundation for environmental management plans and systems.

When planned for, impacts can be managed, mitigated and reversed over the long-term. The Project has an environmental management and surveillance plan that includes the recovery and relocation of wildlife, forest management and use, reforestation, soil conservation and environmental training for Project personnel. The Juanicipio Project's environmental plan is based on the Mexican biodiversity standard (NOM-059-SEMARNAT-2010) from Mexico's Ministry of Environment and Natural Resources (SEMARNAT) and feedback from local stakeholders.

The Juanicipio environmental team identified three focus areas to avoid, minimize and/or offset the loss of biodiversity and ecosystem services associated with the construction and operation of the Juanicipio Project. The Juanicipio team worked with the regulatory agencies and the community to implement a wild fauna relocation program, a reforestation program and a soil conservation program. Selected examples of these programs are described within this section. These programs are part of a compendium of environmental measures that are integrated into the Environmental Management and Surveillance Program that was authorized by the environmental ministry.



WILDLIFE CONSERVATION

The Juanicipio Project team uses wildlife monitoring and biodiversity surveys to detect and track the presence of various species around the site. In an effort to minimize impacts to wildlife, the Juanicipio Project team worked closely with environmental professionals and local authorities to identify five suitable relocation sites, totalling 74 hectares, for the release of rescued wildlife. The relocation program included 140 hours of training for staff, contractors and participants. To date, 442 wildlife individuals have been rescued and released.

REFORESTATION PROGRAM

In addition to rescuing and relocating species of forest vegetation from the Juanicipio Project area, the Juanicipio Project team obtains endemic plants from local nursery producers for the reforestation program. The nurseries support the Company's aim of achieving endemic species conservation and restoration. This enables Juanicipio Project to comply with their environmental restoration commitments to return the site to the density that existed pre-development. To date, 20,900 plants have been relocated and transplanted and 87,400 plants reforested over 63 hectares.



SOIL CONSERVATION

A 97-hectare area near the Juanicipio Project that experienced significant natural soil erosion was selected for the soil conservation program. The Juanicipio Project engaged with local residents from the communities near the Juanicipio Project about the importance of conserving soil and several residents participated in the soil conservation program. One of the soil conservation methods used, terracing, helps soil retention and replicates natural conditions for the growth of native vegetation that will then provide food and habitat for the fauna that are part of the local ecosystem. Since 2018 the program has recovered 17,950 tons of soil through erosion controls such as terracing with coarse woody debris such as fallen trees and large branches, rocks and other materials.

Water Stewardship

Exploration, mining and mineral processing activities require large volumes of water. Efficient use, recycling, pollution prevention and water quality monitoring are critical for ensuring responsible water stewardship. Water stress risks are included in MAG Silver's Enterprise Risk Management register and risk assessments, which are reviewed regularly by the ERAC and reported to the Board.

The Juanicipio Project uses Aqueduct, a tool developed by the World Resources Institute, to better understand water stress under different climate change scenarios in the 2020-2030 period. According to Aqueduct, the Juanicipio Project is in an "Extreme High" water stress area. Juanicipio seeks to minimize withdrawals of freshwater, and the Juanicipio Project's consumption of freshwater in 2021 was only 4% of its total water consumption. As part of its water stewardship strategy, the Juanicipio Project partnered with the Municipality of Fresnillo to operate a wastewater treatment plant. In 2021 the Juanicipio Project sourced almost 164,000 m³ of treated wastewater from the Municipality of Fresnillo. The Juanicipio Project uses treated wastewater in its operations which reduces the volume of freshwater drawn.

The Juanicipio Project water stewardship strategy is to:

- Respect water quotas, monitor discharges and take action to ensure water quality regulations are adhered to;
- Implement efficient closed water circuits in the processing plant; eliminating the need to discharge processed water into water streams;
- Reuse wastewater from the Municipality of Fresnillo; and
- Cooperate with water authorities and other stakeholders, including communities to increase water access for all.

At the Deer Trail Project, water sampling of the historical underground workings was conducted in early 2021 to establish baseline conditions for water level

and quality studies scheduled to begin in 2022. This water monitoring program will include collecting water level and quality data from select nearby wells to build a more accurate water model for the Deer Trail Project. Freshwater consumption for exploration drilling in 2021 was 19,900 cubic meters sourced from surface waters to which the project owns the rights.



With a goal to reduce their freshwater footprint at the Juanicipio Project and ensure that communities have access to safe water, Fresnillo partnered with the Municipality of Fresnillo to upgrade a community wastewater treatment facility initially built by the government to treat city sewage. Fresnillo has an agreement with the municipality to cover 100% of the plant's operating costs and use the treated wastewater to operate the Juanicipio Project plant. As a result of this partnership Fresnillo has access to reclaimed water for mineral processing, greatly reducing the consumption of freshwater and the municipality was able to lower its operating expenses.

Tailings and Waste Management

Tailings Management

Construction of the tailings storage facility (“TSF”) for the Juanicipio Project continued through 2021 in preparation for commercial production. The Juanicipio Project utilizes a three person independent review panel, as well as an Engineer of record to oversee design criteria and ongoing construction. The design and construction of the TSF complies with the regulations indicated in the official Mexican norm (NOM-141-SEMARNAT-2003). In addition, the facility is also aligned with guidelines and standards from The Mining Association of Canada, Canadian Dam Association, the International Commission on Large Dams, and the International Council on Mining & Metals. The Juanicipio Project is in the process of reviewing how to further align its TSF with the Global Industry Standard on Tailings Management issued in 2021.

In 2021, mineralized development material from the Juanicipio Project was transported to and processed at the nearby Fresnillo and Saucito processing plants (both 100% owned by Fresnillo). The TSFs at the Fresnillo and Saucito Mines have been registered with the Church of England Pensions Board and both feature a “low” consequence of failure categorization.

Waste Management

MAG Silver’s approach to waste management incorporates the basic principles of waste management; source reduction, reuse, recycle/recover, treatment and disposal. As our projects continue to advance and grow, MAG Silver will further incorporate the 5 R’s (Refuse, Reduce, Reuse, Repurpose and Recycle) into our waste management and recycling strategies.



Tailings storage facility under construction at the Juanicipio Project.

In 2021, the Juanicipio Project generated approximately 185 tonnes of non-hazardous waste, including scrap wood, plastic and cardboard. 120 tonnes of scrap wood were repurposed in carpentry projects in five local communities. The Juanicipio Project also recovered 96 tonnes of hazardous waste and fully disposed of it at appropriate hazardous waste handling/disposal facilities. In 2021, the Deer Trail Project generated approximately 190 cubic metres of non-hazardous waste, including solid drilling waste (drill containers, bags and boxes) and facilities waste (office waste). 84% of the waste generated was from drilling activities and was disposed of at local facilities.

Progressive Reclamation

Progressive reclamation is an important component of MAG Silver's environmental management system. Progressive reclamation activities minimize the duration of environmental disturbance and shorten the timeframe for achieving closure objectives and closure criteria.

We are committed to progressive reclamation and incorporating a design for closure, with an end land use approach throughout the life cycle of all our projects. We work closely with local communities and regulatory authorities in designing our environmental programs, including progressive reclamation activities.

Our reclamation commitments include:

- Engaging with stakeholders to develop closure objectives and criteria;
- Rehabilitation of disturbed areas that are no longer needed;
- Stockpiling overburden and soil for future use; and
- Collection and protection of vegetation, including seeds.



Rock terraces constructed to mitigate soil erosion as part of the soil conservation program at the Juanicipio Project.

During construction of the Juanicipio Project, overburden and soils were stockpiled for future use in both reclamation and conservation activities. Progressive reclamation is an important element of the Juanicipio Project's closure plans.

“MAG will allocate the necessary resources to meet our reclamation and environmental obligations.”

– MAG Silver Environmental Policy



One of the historic mine workings at the Deer Trail Project.

Deer Trail Project

In 1878, deer hunters made the first discovery of mineral outcrops on the land that is now the Deer Trail Project. Operations commenced, and intermittent production of gold and silver ores continued until 1923. Exploration activities began again in 1945 and continued sporadically until 1975 when they became nearly continuous and focussed on locating extensions of the known mineralization. Production was intermittent from 1976 to 2007.

Over the history of the project, a series of small underground mine sites, some with mills, had been operated. Since 2018, when MAG Silver's subsidiary entered into an option agreement for 100% ownership of the Deer Trail Project, we have undertaken extensive rehabilitation of the historic mine workings and site reclamation projects, as highlighted further below.

As we recognized areas of potential environmental concern on the Deer Trail Project property, we proactively and voluntarily remediated them.

North Fork Clean-Up

The purpose of this work was to clean-up and rehabilitate previously disturbed land. Activities included: the rehabilitation of two areas that had been trespassed on by a prior operator, clean up and removal of drill rubbish from two historical drill sites; and the cleanup of the historical Oxy Min site.

Historic Deer Trail Mine and Mill Reclamation

Historic mine material, including equipment, a damaged building and insulated copper cabling, was removed and trucked off-site to appropriate disposal facilities. MAG Silver arranged for the professional removal of old power transformers and hazardous chemicals, as well as professional asbestos abatement of a number of historic buildings.

In 2020, historical waste rock piles from the mill area were moved to the historical tailings storage area near the mill and the area was recontoured. The historical tailings storage area will be capped with materials from the upper Deer Trail property to fulfill the closure agreement.

Bully Boy Stamp Mill

MAG Silver supported the stabilization of a historic mill building at the request of local community members. The building was reinforced with timber to preserve the historical building and entrances were closed to protect the building and safeguard trespassers from potential injury.

APPENDICES

APPENDIX A: ESG DATA SUMMARY TABLE

APPENDIX B: UN GLOBAL COMPACT TEN PRINCIPLES & SUSTAINABLE DEVELOPMENT GOALS

APPENDIX C: MAG SILVER BOARD COMMITTEES AND CORPORATE POLICIES

APPENDIX D: ADDITIONAL RESOURCES



Historic underground mine rail line at the Deer Trail Project

APPENDIX A: ESG DATA SUMMARY TABLE

CATEGORY	METRIC	UNIT	2020	2021	COMMENTS
Governance					
Business Ethics	Independent board members	#	7	7	Fresnillo 2021: 7 of 12 Directors are independent. MAG Silver 2021: 7 of 8 Directors independent.
	Female workforce	%	6	9	Juanicipio Project: 9% of workforce (employees and mining contractors) are women. MAG Silver: 40% (4 of 10) of the workforce are women.
	Female managers	%	0	0	MAG Silver: 33% (3 of 9) of managers are women.
	Female executive members	%	0	0	
	Female board members	%	33	33	Fresnillo 2021: 33% (4 of 12) of the Directors are women. MAG Silver 2021: 38% (3 of 8) of the Directors are women.
	Policy on executive compensation for ESG performance?		No	No	
	Policy on bribery and corruption?		Yes	Yes	Fresnillo has an Anti-Bribery, Anti-Corruption Policy and Supplier Code of Conduct. MAG Silver has Code of Business Conduct and Ethics and Commitment to Anti-Bribery Conduct.
	UN Global Compact signatory?		Yes	Yes	Fresnillo, the operator of the Juanicipio Project, has been a participant since 2009. MAG Silver has been a participant since 2021.
Social					
Human Rights & Community Relations	Policy on human rights?		Yes	Yes	Fresnillo has a Human Rights Policy embedded in its Sustainability Policy. MAG Silver has its own Human Rights Policy.
	Policy on Diversity, Equity and Inclusion?		Yes	Yes	Both Fresnillo and MAG Silver have Diversity, Equity and Inclusion Policies.
	Targets on diversity and opportunity?		Yes	Yes	Fresnillo plc, the operator of the Juanicipio Project, has a goal is to increase the overall representation of women from 10% to 12% by 2025 and to challenge the glass ceiling at the operating manager and superintendent level, raising the percentage of women in these roles from 2% to 8% by 2025.
	Whistleblower protection?		Yes	Yes	Fresnillo plc has a third-party 24/7 Whistleblower Hotline. MAG Silver has a Whistleblower Protection Policy and a third-party 24/7 Whistleblower Hotline.

CATEGORY	METRIC	UNIT	2020	2021	COMMENTS
Community Relations	Total donations to revenue	%	N/A	N/A	The Juanicipio Project is not in commercial production (See Footnote 1) however, in 2021 the total economic impact of the Juanicipio Project was US\$161M (includes: payment to suppliers, wages and benefits to workers, payments to local and federal governments).
	Agreements in place with artisanal miners, if any?		No	No	There are no artisanal miners in the area.
	Formal agreements with communities or other organizations?		Yes	Yes	The Juanicipio Project has two signed agreements with Fresno City Council for the development of microenterprises or productive projects.
	Community investment and development initiatives		Yes	Yes	Juanicipio Project: Family gardens, backyard poultry, sustainable carpentry workshop, nopal cactus harvesting, "the school is ours" infrastructure program, CETLAR education support, microenterprise projects (sewing, handicrafts, bakery, barbershop, and jewelry and craft workshops).
	Operation-specific responsibility for community relations?		Yes	Yes	The Juanicipio Project has a community relations team who conduct assessments and provide support to communities of interest. Deer Trail Project has a site administrator who has responsibility for implementing HSEC programs.
Labour Practices	National employees	%	100	100	
	Supplier ESG training provided?		No	No	
	Strikes reported?		No	No	There have been no strikes at the Juanicipio Project or Deer Trail Project.
Health & Safety	Lost time injury frequency rate (LTIFR)	Per 1M hrs	9.45	10.08	Juanicipio Project: LTIFR for every 1,000,000 hours worked, includes employees and mining contractors.
	No. of employee fatalities		0	0	2020:0 2019: 0
	No. of contractor fatalities		0	0	2020:0 2019:0
	Total no. of fatalities		0	0	2020:0 2019:0
	Health and safety training provided for workforce?		Yes	Yes	I Care, We Care, High Potential Incidents and Critical Controls programs.
Health and safety training provided for supply chain?		Yes	Yes	Our top tier suppliers are construction contractors (Juanicipio Project) and drilling contractors (Deer Trail Project). Both are subject to site inductions and H&S training is offered by Fresno (operator of Juanicipio Project) or MAG (through contractors).	











CATEGORY	METRIC	UNIT	2020	2021	COMMENTS
Environment					
GHG Emissions	Total GHG emissions (Scope 1 & 2) to revenue	tCO ₂ e/ USD M	N/A	N/A	Juanicipio Project is not in commercial production (See Footnote 1).
	Total GHG emission to production	tCO ₂ e/ Oz Ag	N/A	N/A	Juanicipio Project is not in commercial production (See Footnote 1).
	Total GHG emission to tonnes processed	tCO ₂ e/t	N/A	N/A	Juanicipio Project is not in commercial production (See Footnote 1).
	Policy to reduce emissions?		Yes	Yes	The Sustainability Policy of Fresnillo, applies. TCFD analysis completed by both Fresnillo (2020) and MAG Silver (2021). Fresnillo's evaluation of its Energy Strategy shows that it is technologically viable to support a decarbonisation pathway in the 2021-2030 period. However, the regulatory uncertainty on renewables in Mexico makes it impractical to set a specific decarbonisation target at this point.
	Targets to reduce emissions?		Yes	Yes	Fresnillo has a goal to source 75% of renewable power by 2030.
Air Quality	Non-GHG air emissions program?		Yes	Yes	The Juanicipio Project has an air quality monitoring program. Dust concentration of PM10 and PM2.5 are analyzed at an external lab.
	Policy to improve NOx and SOx emissions?	N/A	No	No	At present the Juanicipio Project does not calculate NOx and SOx.
	Policy to improve VOC or particulate emissions?	N/A	No	No	At present the Juanicipio Project does not calculate VOC or particulate emissions.
Energy Management	Total energy use to revenue	GJ/ USD M	N/A	N/A	The Juanicipio Project is not in commercial production (See Footnote 1).
	Total energy use to production	GJ/ Oz Ag	N/A	N/A	The Juanicipio Project is not in commercial production (See Footnote 1).
	Renewable energy use ratio	%	86	84	During construction, the Juanicipio Project is connected to the Saucito Mine, which sources its renewable energy largely from the Coahuila Wind Farm.

CATEGORY	METRIC	UNIT	2020	2021	COMMENTS
Water & Wastewater management	Total freshwater use to revenue	m ³ /USD M	N/A	N/A	The Juanicipio Project is not in commercial production (See Footnote 1).
	Total freshwater use to production	m ³ /tonnes	N/A	N/A	The Juanicipio Project is not in commercial production (See Footnote 1).
	Freshwater recycled	%	N/A	N/A	During 2021, the Juanicipio Project used 164,000m ³ of wastewater from the municipality of Fresnillo to reduce the use of freshwater. The Juanicipio Project's freshwater consumption equals 4% of the total water consumption.
Waste & Hazardous Materials Management	Total waste (incl. tailings) to revenue	t/USD M	N/A	N/A	The Juanicipio Project is not in commercial production (See Footnote 1). No tailings deposited at Juanicipio. In 2021 development ore was processed at Fresnillo Mine processing plant.
	Total waste (incl. tailings) to production	t/tonnes	N/A	N/A	The Juanicipio Project is not in commercial production (See Footnote 1). No tailings deposited at Juanicipio.
	Tailings waste recycled	%	N/A	N/A	The Juanicipio Project is not in commercial production (See Footnote 1). No tailings deposited or recycled at Juanicipio.
	Independent tailings review?		Yes	Yes	Yes. Fresnillo has established Independent Tailing Review Panel (ITRP) that reviews operations, standards and installations of tailings storage facilities. The Juanicipio Project TSF has an engineer of record.
	Cyanide Use		No	No	

CATEGORY	METRIC	UNIT	2020	2021	COMMENTS
Ecological impacts	Environmental management team in place		Yes	Yes	The Juanicipio Project and MAG Silver have environmental management teams.
	Environmental Management System externally certified		No	No	ISO 14001 environment system implementation on hold for 2022.
	Environmental Reclamation Bond?		Yes	Yes	Juanicipio has posted an environment surety bond that is updated annually.
	Policy to reduce impact on biodiversity?		Yes	Yes	Part of Sustainability Policy of Fresnillo, the operator of Juanicipio, and also MAG Silver's Health, Safety, Environment and Social Responsibility Policies. Juanicipio's biodiversity program has: relocated and transplanted over 20,900 plants and reforested 87,400 plants over 63 hectares. The wildlife conservation program has rescued and released 440 animals. A 97-hectare area near the Juanicipio Project was selected for the soil conservation program and the program has recovered 17,950 tons of soil through erosion controls.
	Major environmental incidents reported?		No	No	
	Policy on environmental impact in supply chain?		No	No	

1. The Juanicipio Project has not reached commercial production as of December 31, 2021 as we are currently constructing and developing the surface and underground infrastructure on the property to support a 4,000 tonnes per day mining operation, with the operational expertise of our JV partner, Fresnillo plc. We expect the Juanicipio Project to reach commercial production in the second half of 2022.

APPENDIX B: UN GLOBAL COMPACT TEN PRINCIPLES & SUSTAINABLE DEVELOPMENT GOALS

UNGC PRINCIPLES	REFERENCE OR COMMENT	UNSDG
HUMAN RIGHTS		
Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights	Human Rights Policy, https://www.magsilver.com/corporate/governance/	  
Principle 2: Businesses should ensure that they are not complicit in human rights abuses	Human Rights Policy, https://www.magsilver.com/corporate/governance/	
LABOUR		
Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining	Human Rights Policy, https://www.magsilver.com/corporate/governance/ , Our People/Labour Relations page 33	  
Principle 4: Businesses should uphold the elimination of forced or compulsory labour	Human Rights Policy, https://www.magsilver.com/corporate/governance/ , Our People/Labour Relations page 33	
Principle 5: Businesses should uphold the effective abolition of child labour	Human Rights Policy, https://www.magsilver.com/corporate/governance/ , Our People/Labour Relations page 33	
Principle 6: Businesses should uphold the elimination of discrimination in respect of employment and occupation	Human Rights Policy, https://www.magsilver.com/corporate/governance/ , Diversity, Equity and Inclusion Policy, https://www.magsilver.com/corporate/governance/ , Our People/Labour Relations page 33	
ENVIRONMENT		
Principle 7: Businesses should support a precautionary approach to environmental challenges	Environmental Policy, https://www.magsilver.com/corporate/governance/ , Environmental Stewardship, pages 47 (Climate Action), 51 (Water Stewardship), 49 (Biodiversity)	  
Principle 8: Businesses should undertake initiatives to promote greater environmental responsibility	Environmental Policy, https://www.magsilver.com/corporate/governance/ , Environmental Stewardship, pages 47 (Climate Action), 51 (Water Stewardship)	
Principle 9: Businesses should encourage the development and diffusion of environmentally friendly technologies	Environmental Policy, https://www.magsilver.com/corporate/governance/ , Environmental Stewardship, pages 47 (Climate Action), 51 (Water Stewardship)	
ANTI-CORRUPTION		
Principle 10: Businesses should work against all forms of corruption, including extortion and bribery	Code of Business Conduct and Ethics, https://www.magsilver.com/corporate/governance/ , Our Communities/Economic Impact page 43	

- Safety Training: Juanicipio Project, more than 51,400 hours; Deer Trail Project, more than 770 hours safety training
- At the Juanicipio Project, antigen test campaigns were conducted for employees, contractors and family members and Fresnillo shared COVID-19 tests with the communities neighbouring the Juanicipio Project
- The Juanicipio Project team partnered with local health authorities to support a breast cancer mammogram screening program

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- Construction of a new health and safety training center at the Juanicipio Project began, opening in 2022
- Training was provided to all employees on the Step Up Culture framework at the Juanicipio Project
- The Juanicipio Project team collaborated with the Municipal Agriculture Development Agency to pilot 25 family-size vegetable gardens and 25 backyard poultry farms and provided instruction, training and support to those involved in the pilot projects
- The Juanicipio Project team partnered with IBBY Mexico to assist schools in transitioning from in-person reading workshops to virtual reading workshops for kindergarten and primary students in response to COVID-19

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- Diversity, Equity and Inclusion Policy
- At MAG Silver, 38% of the Board of Directors, 17% of the officers of the Company and 40% of employees are female
- At the Juanicipio Project, Diversity, Equity and Inclusion training was provided to 60 employees including executives, managers and selected employees

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- 96% of water used at the Juanicipio Project was sourced from the Fresnillo municipality wastewater treatment facility
- MAG Silver included water stress risks in their Enterprise Risk Management register and risk assessments
- Water sampling of the historic underground workings was conducted at the Deer Trail Project
- Juanicipio use Aqeduct, a tool developed by the World Resources Institute (WRI), to better understand water stress under different climate change scenarios in the 2020-2030 period

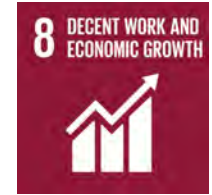
6

- Wages and benefits through employment, local procurement and training
- 61% local employment at the Juanicipio Project; 92% local employment at the Deer Trail Project
- The Juanicipio Project collaborated with the municipality to develop capacity building projects that included sewing collectives, jewelry and handicrafts, beauty and barbershop, and carpentry workshops

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- 84% of the total energy use at the Juanicipio Project came from renewable sources
- MAG Silver completed a TCFD review
- Physical climate change risks were included in MAG Silver's risk register
- MAG Silver established a Technical Committee which reviews technical aspects of safety and environmental risks, specifically climate change impacts and tailings management

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APPENDIX C: MAG SILVER BOARD COMMITTEES AND CORPORATE POLICIES

MAG SILVER BOARD COMMITTEES

Health, Safety, Environment and Community (HSEC) Committee

As part of its mandate to assist the Board in the oversight of ESG and sustainability matters, the HSEC Committee is responsible for reviewing MAG Silver's sustainability conduct including the Health, Safety, Environment and Social Responsibility Policies, the Human Rights Policy, and for monitoring the Company's practices and performance in these areas. The HSEC Committee meets a minimum of four times per year and reports to the Board after each HSEC Committee meeting.

The HSEC Committee Charter is available on the Company's website at <https://magsilver.com/corporate/governance/>.

Governance and Nomination Committee

The Governance and Nomination Committee of the Board also plays an important role in assisting the Board with its oversight of ESG matters. This Committee is responsible for developing and implementing governance guidelines and principles, providing governance leadership to the Company and monitoring governance programs and policies, including without limitation, the Code of Business Conduct and Ethics and the Anti-Bribery and Anti-Corruption Policy. The Committee regularly reviews MAG's policies to ensure compliance with the applicable rules and regulations, and where necessary or desirable on account of governance trends that are appropriate for the Company, recommends changes, or the adoption of further policies, to the Board for approval. The Committee meets a minimum of four times per year and reports to the Board after each meeting.

The Governance and Nomination Committee Charter is available on the Company's website at <https://magsilver.com/corporate/governance/>.

Technical Committee

In 2021, the Technical Committee of the Board was formed with the mandate to assist the Board in fulfilling its oversight responsibilities with respect to the Company's operational performance and operating risks from a technical perspective. The Company's operations include exploration and development projects, operating mines, projects in reclamation and projects being considered as acquisition targets. The Technical Committee meets a minimum of twice per year and reports to the Board after each Technical Committee meeting.

The Technical Committee Charter is available on the Company's website at <https://magsilver.com/corporate/governance/>.

Audit Committee

The Audit Committee of the Board is responsible for reviewing the Company's financial reporting procedures, internal controls and the performance of the Company's external auditors. The Audit Committee also reviews the disclosure of payments to government in accordance with the Canadian Extractive Sector Transparency Measures Act ("ESTMA").

The Audit Committee Charter is available on the Company's website at <https://magsilver.com/corporate/governance/>.

Compensation and Human Resources Committee

The primary purpose of the Compensation and Human Resources Committee is to assist the Board in carrying out its responsibilities with respect to: a) establishing guidelines and principles with respect to compensation and benefits provided by MAG Silver to its employees; b) monitoring MAG Silver's significant strategies, programs and policies relating to compensation and human resources; c) leading the annual performance evaluation of the CEO and determining compensation for the CEO and other executive officers of MAG Silver; d) overseeing MAG Silver's equity-based compensation plans; e) determining directors' compensation; and f) reviewing succession plans with respect to the CEO and other executive officers of the Company.

The **Compensation and Human Resources Committee Charter** is available on the Company's website at <https://magsilver.com/corporate/governance/>.

MAG SILVER POLICIES

Health and Safety Policy

In early 2021, MAG Silver updated its **Health and Safety Policy** to further clarify its approach and strengthen its commitments to health and safety. We are committed to the health, safety and welfare of all employees, directors, consultants and contractors, as well as the safety and well-being of their families and the communities surrounding our operations. We expect all team members to take responsibility for their personal safety and for the safety of others working around them. We are committed to working towards a culture of zero harm. Through a strong risk management approach, we engage with and train employees and contractors under our direction to recognize, understand and mitigate hazards of the workplace to prevent incidents and injuries.

Environmental Policy

In early 2021, we updated our **Environmental Policy** to strengthen our commitments to minimizing our environmental impact and protecting the natural environment of the areas in which we work or have an interest in.

MAG Silver is committed to wise environmental stewardship. Our employees care about protecting the environment for future generations while providing for safe, responsible and profitable projects by developing natural resources for the benefit of its stakeholders.

Social Responsibility Policy

In early 2021, we updated our **Social Responsibility Policy** to align with industry best practice. MAG Silver takes a shared-value approach to local development activities to promote sustainable and lasting economic and social benefits. We are focused on building trust and respect, consideration of community and stakeholders' concerns, and making a positive difference in the communities in which we live and work.

Human Rights Policy

In early 2022, MAG Silver updated its **Human Rights Policy** to strengthen its commitment to promoting a culture of respect for human rights and inclusion that aligns with the United Nations Guiding Principles on Business and Human Rights, the International Labour Organization's ("ILO") Declaration on Fundamental Principles and Rights at Work, international humanitarian law and applicable local human rights legislation.

We strive to safeguard the promotion of human rights in our workplace and integrate human rights into our due diligence and risk assessment processes, and other policies and procedures.

Diversity, Equity, and Inclusion Policy

In 2021, MAG Silver updated its **Diversity, Equity and Inclusion Policy**. We believe in and embrace the benefits that diversity brings to our Board, members of senior management and all employees of our company and our subsidiaries. Diversity, equity and inclusion promotes the recognition and use of all available talent, creates opportunities for innovation, and drives strategic advantage to achieve our objectives and deliver positive results to our stakeholders through a range of perspectives, experiences and expertise. We are committed to fostering and cultivating a diverse, equitable and inclusive culture and workforce by selecting the best individuals to occupy our Board, senior management and other roles within our company, free of bias or discrimination.

We are committed to creating and supporting an inclusive, equitable and diverse workplace that recognizes and values differences, where everyone is treated fairly and with respect, and where all employees have equal opportunity to succeed.

In early 2021, MAG Silver committed to increasing Board and senior management diversity. We have exceeded our target of having a minimum of 30% of the Board of Directors being female, as currently 37.5% of MAG Silver's Board is female. Going forward, we will continue our efforts to incorporate a broad range of diversity dimensions at the Board and within management, while promoting a culture of equity and inclusion within MAG Silver.

Code of Business Conduct and Ethics

In early 2022, MAG Silver approved and updated its **Code of Conduct** to support our commitment to the highest standards of ethical business practice.

We believe that this is simply the right way to do business. The Code provides guidance on ethical and legal responsibilities and all MAG Silver personnel are expected to comply with the Code.

Anti-Bribery and Anti-Corruption Policy

In early 2022, MAG Silver approved an updated **Anti-Bribery and Anti-Corruption Policy**. The Anti-Bribery and Anti-Corruption Policy is critical to maintaining our corporate reputation and protecting the interests of our shareholders, employees, customers, suppliers, business partners, stakeholders and communities.

The objective of the Policy is to provide guidance and procedures to ensure that we conduct business in an honest and ethical manner when dealing with Public Officials and all other parties, and in compliance with all applicable laws and regulations pertaining to bribery and corruption. All directors, officers, employees and key consultants annually acknowledge MAG Silver's Anti-Corruption and Anti-Bribery Policy by signing a Compliance Certificate.

Whistleblower Protection Policy

In 2021, MAG Silver updated its Whistleblower Protection Policy to strengthen its commitments and reporting system. We are committed to maintaining a system which allows us to receive, retain and address all complaints received relating to, among other things, accounting, internal accounting controls, auditing matters, violations of our Code of Conduct, violations of other internal policies and guidelines (including anti-bribery and corruption), or violations of any applicable law or regulation. The Audit Committee oversees the Whistleblower Protection Policy.

MAG Silver has established an independent, third-party, whistleblower hotline through Integrity Counts, a Canadian provider of global ethics reporting services. Integrity Counts, as an independent and external administrator of this helpline, allows any employee, contractor or member of the public who becomes aware of a violation of MAG Silver's Code of Conduct, violations of other internal policies or guidelines or violations of any applicable law or regulations to anonymously report suspected violations. Submissions can be made in any language, twenty-four hours a day, seven days a week.

Enterprise Risk Management Framework

MAG Silver is committed to improving its ability to create, enhance and protect enterprise value through the regular identification and management of risks in carrying on its business. We recognize that risks represent both opportunities and threats, and therefore an effective, enterprise-wide risk management program is essential to enable us to pursue our strategic objectives and realize operational goals within an acceptable range of associated risk.

MAG Silver has a corporate crisis management team and a Crisis Management and Communication Plan that provides guidelines for the successful and professional management and communication of business interruption events affecting our operations, reputation, employees and their families, contractors, neighbouring communities and the surrounding environment.

In 2021, MAG Silver formed the Enterprise Risk Advisory Committee ("ERAC") made up of five members of the MAG Silver management team, to oversee the processes that are in place for identifying significant risks to the achievement of the Company's objectives, and to confirm that procedures are established to mitigate the impact of significant risks in the best interests of our stakeholders and in accordance with the risk appetite of the Company. The ERAC is responsible for reporting on the principal risks and mitigation strategies to the HSEC, Technical and Audit Committee on a quarterly basis, and to the Board at least annually, or more frequently as requested.

Also in 2021, MAG Silver approved an Enterprise Risk Management ("ERM") Policy. All employees, directors, consultants and contractors providing services for or on behalf of the Company are responsible for incorporating this ERM Policy into planning and business decisions to support the achievement of the objectives stated therein.

APPENDIX D: ADDITIONAL RESOURCES

SUSTAINABILITY REPORTING

In addition to this ESG Sustainability Report, MAG Silver's sustainable reporting suite includes the following reports and sustainability policies which are available on our website. www.magsilver.com



CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Sustainability Report includes certain statements that may be deemed to be “forward-looking statements” or “forward-looking information” within the meaning of the U.S. Private Securities Litigation Reform Act of 1995 and Canadian securities laws (collectively, “forward-looking statements”). All statements in this Sustainability Report, other than statements of historical fact, are forward-looking statements, including, but not limited to, statements regarding: the contents or production of any subsequent sustainability reports; the further development of a preliminary climate risk assessment; the formation of a joint health and safety committee with Fresnillo on the timing anticipated herein, if at all; MAG Silver’s participation in the United Nations Global Compact – Target Gender Equity Accelerator Program; the construction and opening of a new health and safety training centre; expansion of community and environmental initiatives and projects; progress towards MAG Silver’s alignment with ISO 14001 Occupational Health and Safety Management requirements and receipt of an ISO 14001 Environmental Management System certification; the exploration of feasible decarbonization opportunities, including evaluation and utilization of renewable energy sources; the development of a climate change management plan and planned disclosures related thereto; and other future events or developments. Forward-looking statements are often, but not always, identified by the use of words such as “seek”, “anticipate”, “plan”, “continue”, “estimate”, “expect”, “may”, “will”, “project”, “predict”, “potential”, “targeting”, “intend”, “could”, “might”, “should”, “believe” and similar expressions. Although MAG believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, including the assumption that environmental and social programs and initiatives currently being advanced will continue to progress in a manner that aligns with expectations, such statements are not guarantees of future performance and involve known and unknown risks, uncertainties and other factors that may cause actual results or developments to differ materially from those identified in the forward-looking statements.

Factors that could cause actual results to differ materially from those in forward-looking statements include, but are not limited to, impacts (both direct and indirect) of COVID-19; supply chain constraints and general costs escalation in the current inflationary environment heightened by the invasion of Ukraine by Russia; changes in applicable laws, regulations or community guidelines; changes in mineral production performance, exploitation and exploration successes; continued availability of capital and financing; general economic, market or business conditions, political risk, currency risk and capital cost inflation; and such other risks that are identified in MAG Silver’s regulatory filings with the Securities and Exchange Commission in the United States, as filed on EDGAR at www.sec.gov, and with the Canadian securities commissions and regulatory authorities, as filed on SEDAR at www.sedar.com.

These forward-looking statements are made as of the date of this Sustainability Report and MAG Silver does not intend, and does not assume any obligation, to update these forward-looking statements in order to reflect events or circumstances that may arise after the date of this Sustainability Report, except as required under applicable securities legislation. Readers are thus cautioned not to place undue reliance on forward-looking statements.

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