

Deliverable D7.3

Communications and Social Awareness Plan





Deliverable report

Deliverable No.	D7.3	Work Package No.	WP7	Task/s No.	Task 7.2	
Work Package Title		Communications and Social Awareness Plan				
Linked Task/s Title		T7.2 Definition of the Community Engagement Strategy for every pilot site				
Status		Final	(Draft/Draft Final/Final)			
Dissemination level		PU-Public	(PU-Public, PP, RE-Restricted, CO-Confidential)			
Due date deliverable		2023-01-31	Submission date 2023-01-31			
Deliverable versio	n	D7.3_DIGIECOQUARRY_ Communications and Social Awareness Plan_v1.4				

Document Contributors

Deliverable responsible	ZABALA				
Contributors		Organization			
Leire Martiarena		ZABALA			
Lucia Eguillor ZABALA					
Lorena Viladés	ANEFA				
Reviewers		Organization			
Lara Maella Bikanda		VICAT			
César Fernández	HANSON				
Paolo Zambianchi	HOLCIM				
Max Florian Pescher	CSI				

Document History

Version	Date	Comment
1.1	2023-01-17	First Draft ready for review
1.2	2023-01-19	First ANEFA review
1.3	2023-01-26	Second draft ready for final validation
1.4	2023 – 01-31	Final version



Disclaimer

This document reflects only the author's view. Responsibility for the information and views expressed therein lies entirely with the authors. The European Commission are not responsible for any use that may be made of the information it contains.



Table of contents

ı	Deli	iverable report	3
I	Doc	cument Contributors	3
ı	Doc	cument History	3
ı	Disc	claimer	4
-	Гab	ole of contents	5
ı	_ist	of Abbreviations	7
1	E	Executive Summary	8
2	li	ntroduction and scope	9
	2.1	Relation to other activities and deliverables	9
	2.2	Structure of the deliverable	10
3 of		Mechanisms for social acceptance and Community Engagement Strategy (CES) in the framev GIECOQUARRY	ork 11
3	3.1	Definition of the Community Engagement Strategy (CES) for every pilot site	11
	3	3.1.1 Communications and Social Awareness plan	12
4	C	Communications and Social Awareness plan for each pilot site	13
4	4.1	Communications and Social Awareness plan - VICAT	14
	В	Background information to develop the Communications and Social Awareness plan	14
	C	Communication and awareness plan – VICAT	15
4	4.2	Communications and Social Awareness plan – HANSON	19
	В	Background information to develop the Communications and Social Awareness plan	19
	C	Communication and awareness plan – HANSON-VALDILECHA	20
4	4.3	Communications and Social Awareness plan – HOLCIM	23
	В	Background information to develop the Communications and Social Awareness plan	23
	C	Communication and awareness plan – HOLCIM – MILANO	24
4	4.4	Communications and Social Awareness plan – CSI	27
	В	Background information to develop the Communications and Social Awareness plan	27
	C	Communication and awareness plan – CSI – MAMMENDORF	29
4	4.5	Communications and Social Awareness plan – CIMPOR	32
_	В	Background information to develop the Communications and Social Awareness plan	32



	Communication and awareness plan – CIMPOR	33
5	Conclusions	36
6	Annex: Best Practices on Community Engagement	37



List of Abbreviations

ABBREVIATION	DESCRIPTION
CA	Consortium Agreement
CES	Community Engagement Strategy
CSR	Corporate Social Responsibility
EC	European Commission
GA	Grant Agreement
IQS	Intelligent Quarrying System
RM	Raw Materials
SDGs	Sustainable Development Goals
SLO	Social Licence to Operate
WP	Work Package
VICAT	Granulats Vicat
HANSON	Hanson Hispania
CIMPOR	AGREPOR AGREGADOS - EXTRACÇÃO DE INERTES
HOLCIM	HOLCIM AGGREGATI CALCESTRUZZI
CSI	Cronenberger Steinindustrie Franz Triches GmbH & Co.KG



1 Executive Summary

This document constitutes the Deliverable D7.3 Communications and Social Awareness Plan of the DIGIECOQUARRY project. This deliverable corresponds to the Task 7.2 (Definition of the Community Engagement Strategy for every pilot site) of Work Package (WP) 7 Mechanisms for social acceptance & interaction with policymakers.

The Project INNOVATIVE DIGITAL SUSTAINABLE AGGREGATES SYSTEMS (H2020-SC5-2020-2) will exploit the aggregates industry's great potential through a coordinated approach towards construction materials management with the final goal of reducing EU external supply dependency as well as leading to an efficient use of resources. DIGIECOQUARRY will develop systems, technology and processes for integrated digitization and automation real-time process control, to be piloted in 5 EU quarries with the target of improving health and safety conditions for workers. The pilot campaigns will lead to improved efficiency of processes maximizing quarry resources and sustainable management of water, energy emissions, minimized environmental impact and expanding the EU aggregates and construction business. Coupling Artificial Intelligence approaches with cyber-physical systems and the Internet of Things concept, make Industry 4.0 approach possible and the smart sustainable extractive site a reality. All phases of the process, from extraction to the end user are covered by DIGIECOQUARRY, ensuring communication with policy makers, social acceptance activities and international cooperation with the Colombia and South Africa partners to share knowledge and best practices. The development of an innovative Intelligent Quarrying System (IQS) will increase the sustainable supply of minerals for the construction sector as well as enabling the sustainable extraction of EU's mineral resources in existing and new quarries.

This Project includes 25 partners and will last for 48 months, starting on 1st June 2021. It is divided into 11 Work Packages. One of them is Work Package 7 (WP7), named Mechanisms for social acceptance & interaction with policymakers, which will cover the complete duration of the Project.

The main objective of WP7 is to establish mechanisms, tools and methodologies to build long-term and mutually benefitting relationships between quarries and local stakeholders, ensuring the **obtention of the Social Licence to Operate (SLO) in the 5 pilot quarries**.

WP7 will work very close to the pilots in WP6 (and in line with WP9) to: (1) Obtain the social license to operate (SLO); (2) Generate community support and deliver positive and effective outcomes for Raw Materials (RM) projects; (3) Integrate the 5 pilot sites involved with the local identity and values; (4) Include community participation in RM projects decision-making and design; (5) Build trust, relationships, feelings of ownership, and a sense of collaboration through the provision of meaningful and ongoing community engagement with local stakeholders and other policy makers; (6) Establish and develop dialogue and participation processes with local communities; (7) Provide transparent and responsiveness access to project information and activities; (8) Define and implement one-way and two-way communication actions with policy makers.

This deliverable, elaborated under Task 7.2 Definition of the Community Engagement Strategy for every pilot site, is based on the stakeholder prioritisation and the social risks identified in deliverables D7.1 and D7.2 and provides a communication and social awareness plan for each pilot site including potential actions and activities that could be implemented between February and June 2023.



This document will serve as guideline for pilots to interact with the corresponding local communities through the different activities of the project and will be the basis for the elaboration of the Community Engagement Strategy (D7.4), identifying the focus issues for the interaction with local stakeholders.

In addition, deliverable D7.3 includes as annexes, 20 Best Practices on Community Engagement conducted by other extractive industries around the world, and which could serve as successful examples for DIGIECOQUARRY pilots when developing their own engagement processes within the project.

2 Introduction and scope

The D7.3 deliverable is the first output of the task 7.2, Definition of the Community Engagement Strategy for every pilot site, run in the frame of WP7, Mechanisms for social acceptance & interaction with policy makers, led by ZABALA and involving the following other partners: ANEFA, VICAT, HANSON, HOLCIM, CSI, CIMPOR.

The main objective of task 7.2 is to design a Community Engagement Strategy adapted each pilot site and includes the principles that guide the strategies, desired outcomes, as well as the specific methods of engagement, and education and awareness raising activities with the local stakeholders.

In task 7.1 **ZABALA** built a **context narrative** for each pilot site and identified the **relevant stakeholders** of each pilot site, focusing on the local community and those with an interest in or influence on the project. Furthermore, **ZABALA** identified the main **potential risks in the extractive industry** at global level and based on this general risk identification, **ZABALA** identified then the **key social risks in each pilot site** that could affect the DIGIECOQUARRY project development directly or indirectly through a consultation and validation process with pilot representatives (internal local stakeholders).

The identification of risks **developed in task 7.1** enabled to define the Communications and Social Awareness Plan (developed in this deliverable D7.3) and will enable to establish priorities when designing the Community Engagement Strategy (CES) to be developed in deliverable D7.4 in month 24.

2.1 Relation to other activities and deliverables

WP7 is devoted to social acceptance and interaction with policy makers to obtain the SLO and promote best quarrying practices. This WP will get the local communities and the general public involved to define the future of the non-energy extractive sector under this new approach.

Thus, WP7 will work very close to **WP8** and **WP9**. WP7 will establish mechanisms, tools, and methodologies to obtain the SLO in the 5 pilot quarries (Fig. 1). WP8 will establish a powerful, solid network of stakeholders and WP9 will ensure dissemination and communication, including exploitation and business plan definition.

Social acceptance, market uptake and management, will aim at developing and implementing the appropriate mechanisms for social acceptance (WP7) joining forces and finding synergies with related projects and initiatives through tailored networking activities with key stakeholders at EU/world level (WP8), defining and undertaking communication and dissemination actions to maximise the project impact (WP9).



WP7 Mechanisms for social acceptance & Clustering activities for a solid EU knowledge base on raw materials WP9 Dissemination, Communication and Exploitation

Figure 1 Relationship between WPs 7, 8 and 9

2.2 Structure of the deliverable

With the above in mind, the "Communications and Social Awareness Plan" is structured as follows:

Section 1 - Executive summary: Contains a brief statement of the project.

Section 2 – Introduction and scope: Provides introductory information with respect to the Communications and Social Awareness Plan and its structure as well as its scope and its relation to other tasks, activities and deliverables.

Section 3 – Mechanisms for social acceptance, Community Engagement Strategy (CES) and Communications and Social Awareness plan: Introduces the background and rationale behind WP7, including the introduction to the Mechanisms for social acceptance and the Community Engagement Strategy (CES) activities in the project, and more specifically the background and rationale behind the Communications and Social Awareness plan, objective of the present deliverable.

Section 5 - Conclusions: Pertains the main conclusions of the Communications and Social Awareness Plans as well as the way forward.

Section 6 – Annexes: Collection of Good Practices on Community Engagement.



3 Mechanisms for social acceptance and Community Engagement Strategy (CES) in the framework of DIGIECOQUARRY

One of the main specific objectives of DIGIECOQUARRY is to foster social acceptance by introducing novel participatory processes and engagement actions with local communities and policy makers by **establishing a Community Engagement Strategy (CES) to achieve the Social License to Operate (SLO)** and improve public acceptance and trust of the new quarrying technologies. As a result, the project will generate positive Environmental, Social, H&S and Economic impacts related to quarries, contributing to expand and strengthen the EU aggregates industry.

As part of the process to design the CES, deliverable D7.1 was addressed to understanding the European Raw Materials sector and its key social risks as well as the local context and particularities of each pilot site. Furthermore, an identification of the main stakeholders was carried out for each pilot site, focusing on the local community and those with an interest in or influence on the project.

In deliverable D7.2, we have identified the key social risks in each pilot site, assessing their likelihood and impact, through a participatory process (consultation and validation) with the pilot representatives (internal stakeholders).

The final compilation of social risks per quarry together with the identification of stakeholders will allow us to establish priorities when designing the CES. Thus, considering the likelihood and impact of each social risk, the CES will monitor and manage these risks and establish specific mitigation actions during the project and beyond. The **CES will enable the project to mitigate the risks**, both those already existing in each of the quarries in their daily operations and the potential risks as a result of the implementation of the technology developed in the project. This public participation and stakeholder involvement processes, transparency and information disclosure, and good and open communication, will increment the existing credibility, reliability, and acceptance, allowing ultimately to achieve the **SLO of the project with the local communities and stakeholders**.

3.1 Definition of the Community Engagement Strategy (CES) for every pilot site

The second task within WP7 is to define the Community Engagement Strategy (CES) adapted to every pilot site including the principles that guide the strategies, desired outcomes, as well as the specific methods of engagement, education and awareness raising activities, when they will be undertaken and why. It will also outline plans for dealing with issues and complaint processes, and how on-going evaluation of engagement will be done.

These CES is accompanied by a detailed Communications plan and will seek to involve the local community of the pilot sites, with the aim of including community inputs in the process of developing the strategy. A version of the strategy will be presented to the local stakeholders to ensure socialisation as well as providing an opportunity for feedback, which will be validated through by local partners through a questionnaire sent to representatives of each community or through a focus group of local representatives.



3.1.1 Communications and Social Awareness plan

As part of the definition of the CES, a Communications and Social Awareness plan has been designed to serve as guideline for local partners to interact with the corresponding local communities through the different activities of the project.

The two main objectives of this Communications and Social Awareness plan is therefore to start and/or strengthen the communication with key stakeholders of each quarry to:

- Inform about the DIGIECOQUARRY project and its improvements and benefits for the quarry and its stakeholders.
- Organise interaction and gather the perception of key stakeholders about the quarry and its future development in order to ensure peaceful and mutually beneficial relationships.

This plan comprises one-way communication and two-way communication activities. These activities may include, among others, specific social engagement online tools, factsheets, neighbourhood newsletter, newspaper ads, social media engagement, group or committee briefings or regular news columns. Furthermore, the Communications and Social Awareness plan includes community education tasks, such as publicly displayed photomontage, open days, frequent stalls at community events and markets, or school education sessions.

MAIN FEATURES FOR AN EFFECTIVE COMMUNICATION AND SOCIAL AWARENESS PLAN

Communication is key to raise interest among stakeholders and build a long-lasting relationship. A clear communication strategy must be developed since the beginning of the engagement and raising awareness process.

An important issue to consider in terms of communication with local communities is the figure of a contact person. This person needs to build a relationship based on trust with the members of the community by giving them accurate information and being available to solve their doubts and concerns. This person can be a worker of the local administrations, or the companies implementing the project or can be specifically hired for this purpose. It is advisable, in the case of very close communities, to select someone from the community who can play this role after receiving some training.

The communication plans are built up on the stakeholders' analysis and mapping made in the previous steps of this process: understanding of the stakeholders is needed to define the messages, the messengers and the channels.

- 1. Elaborate the message: the message should offer information about the project, but it should be clear enough, in plain language, so that all citizens can understand it. Focus on the impact that the project will have in the community rather than in technical aspects and highlighted the aspects that are priorities for the community.
- **2. Choose the messenger**: the correct messenger can be as important as the message itself. It is always a good option to count on the participation or informal leader or "community champions": people who are especially active and respective within the community to transmit the message to the rest of the individuals, although everyone should have the right to participate directly through different means.



- **3.** Choose the communication channel: the most effective channel will be the one that is already used by the stakeholders, so they do not have to do any extra effort to get in touch with the project. It is important to ask stakeholders which channel is more convenient for them. The communication can be done by using posters, calling by phone, sending emails, or even posting in social media channels.
- **4. Contacting local media** is also very recommendable, as it will help to raise awareness on the initiative and will give recognition to the local communities' participation.
- **5.** Set a calendar with the project milestones that should be communicated: communication is a living process, and it should be constant to build a relation based on trust. Therefore, designing a calendar with the main milestones of the project will help identifying content to communicate to the community.
- **6.** Maintain the relationship with stakeholders after the engagement effort: it is important to create continuous occasions for bi-directional communication: information about the project, questionnaires, etc. But always avoiding spamming the citizens: the frequency of communications must be decided in accordance with their availability and interest.

4 Communications and Social Awareness plan for each pilot site

In this section we will provide the Communication and social awareness plan of each pilot site. The communication plans will aim at starting communication with the main stakeholders and approach the ones that will be more closely engaged in a later stage. Each plan summarises the communication goals, strategies, channels and tools to be implemented with each stakeholder group.

The proposal of the communication approaches and activities suggested for each quarry are based on the **stakeholder classification** obtained in deliverable 7.1 and on the **evaluation of social risks** of each quarry developed in deliverable 7.2. Therefore, the engagement goals set in the stakeholder classification matrix define the characteristics of the communication with each stakeholder group and the actions proposed aim at engaging different stakeholders according to the engagement level required from each of them.

The different actions will be continuously monitored and adapted to ensure that key stakeholders (employees, public authorities and local communities) are fully aware of the project and ready to be consulted or collaborate in specific actions once the engagement phase starts. Furthermore, actions with local communities will be closely monitored due to the complexity to build long lasting trustful relations and regular interaction, which is key for the definition of the Social License to Operate (SLO) mechanism in Europe.

It is important to highlight that all the activities proposed in the communication plans have been reviewed and approved following each quarries/companies' communication and relationships strategies and policies, and all the proposed actions will be continuously updated to ensure their effectiveness. In any case, the activities will be adapted to the resources that are needed and the results that are being achieved.

The actions proposed to the pilots will aim at engaging different stakeholders according to the engagement level required from each of them. Action will be continuously monitored and adapted to ensure that key stakeholders (employees, public authorities and local communities) are fully aware of the project and ready to be consulted or collaborate in specific actions once the engagement phase starts.



Actions with local communities will be closely monitored due to the complexity to build long lasting trustful relations and regular interaction, which is key for the definition of the Social License to Operate (SLO) mechanism in Europe.

SCHEDULE OF THE COMMUNICATION ACTIONS

The different set of actions presented for each pilot site will be implemented from February to June 2023 to enable quarries stablishing or strengthening contact with local stakeholders to ensure the later engagement phase. The following chart shows a preliminary schedule for the implementation of the first communication and awareness actions. As we can see, during the next two months, February and March 2023, the main communication messages, formats and documents will be defined along with pilots. During April and May the first contacts and the establishment of the communication channels will be conducted. Finally, in May the corresponding meetings with the key stakeholders of each quarry will be organised and in June feedback about their expectations and opinions about the engagement activity within DIGIECOQUARRY project will be collected.

It is important to highlight that the schedule has been checked with every quarry/company's communication department and adapted to the existing communication strategies and plans.

	2023				•
	February	March	April	May	June
Elaboration of documents and messages					
Firts contact					
Set communication channels					
Meetings					
Feedback collection					

4.1 Communications and Social Awareness plan - VICAT

Background information to develop the Communications and Social Awareness plan

Stakeholder classification of FENOUILLET plant (D 7.1) (Scale: 0-3)

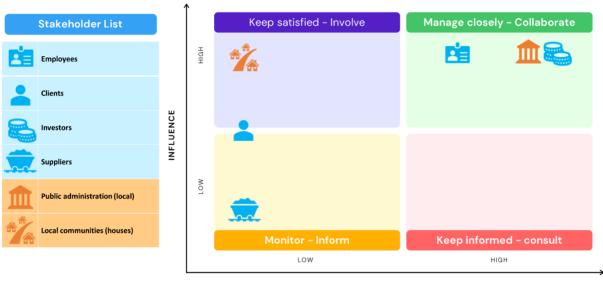
ICON	Stakeholder	Influence	Interest/impact
	Employees	3	2
	Clients	2	1
	Investors	3	3
	Suppliers	1	1
1	Public administration (local)	3	3
	Local communities (houses)	3	1



Evaluation of social risks of FENOUILLET plant (D7.2)

SDG POTENTIAL RISKS		TENTIAL RISKS	STAKEHOLDER INVOLVED		RS
SDG 3	7	Expose workers to risks of fatal accidents, injuries and physical and mental health problems	Employees		8
SDG 11	41	Pollute air, land and water	Local community		12

Based on the influence each stakeholder exerts on the quarry's activity and the impact they may have from it, including the main social risk, the following matrix has been built to set the engagement objectives for each group:



INTEREST/IMPACT

Communication and awareness plan - VICAT

The Communication and awareness plan of VICAT for the next 6 months will be mainly focused on presenting the project at internal and external level. Internally, actions will be addressed to coordinators and managers to introduce the project and explain the main goals, benefits, activities, and timeframe. In addition, they will learn the sustainability benefits that the project will generate (environmental, economic, social) in relation to the sustainability policies and trends that are taking place within the extractive sector at EU level, including the Agenda 2030 and the Sustainable Development Goals (SDGs). Once the managers and coordinators learn about the project and its implications, they will be able to communicate it to the employees, who will get familiar with it through the regular internal meetings. In addition, posters about the goals, benefits, and activities of the DIGIECOQUARRY project will be displayed in the Fenouillet and Carbonne quarries to inform about the project.

Furthermore, clients, investors and suppliers will be informed about the project. To achieve so, first of all, the Commercial, Marketing and Communication departments will be trained on the project and the benefits and implications for the future sustainability of the extractive industry. It will be also important to explain them



the implications in relation to the new requirements, standards and policies addressed to suppliers and clients related to sustainability within the quarry's supply chain as a consequence of the DIGIECOQUARRY project. These new policies will be also relevant for investors who integrate sustainability issues into their investing criteria.

At external level, VICAT has been undertaking several actions to minimize its environmental and visual impact in the area. Furthermore, the company is undertaking a great rehabilitation plan both in the Fenouillet and Carbonne quarries where land walls are being built, trees are being planted, and a number of energy and water efficient measures are being undertaken. In addition, the Carbonne quarry, which has a useless land that used to be a former cornfield, has being conditioned with a lake that hosts a restaurant and water adventure activities for the local communities. Within this context, the communication objective of the company for the following months will be focused on presenting and communicating these renovation actions supported by the actions developed under the DIGIECOQUARRY project by organising open door events addressed to public authorities and the general public, especially the neighbouring businesses and local residents. In addition, dedicated meetings and site visits with the City Council to update on the DIGIECOQUARRY project progress will be also conducted.

COMMUNICATION GOALS, STRATEGIES, CHANNELS AND TOOLS

The following table summarises the communication goals, strategies, channels and tools to be implemented with each stakeholder group:

Stakeholder group	Engagement objective	Communication goal	Channel/tool
Employees	Collaboration	Inform about the DIGIECOQUARRY project set the basis for bi-directional communication	 Quarry's internal communication: Presentation of project and regular updates in coordinators/managers meetings Development of poster/communication material about the project to inform employees
Clients	Inform/	Inform about the benefits of DIGIECOQUARRY in the final product and about the sustainable supplier requirements/policy as a result of the project — aligned with their business priorities	Use of existing communication channels: Train the commercial/marketing/communications departments on the project and benefits for the future sustainability of the business activity Informal and direct information by commercial staff
Investors	Collaborate	Inform about the benefits of DIGIECOQUARRY for the future sustainability of the business activity – potential sustainable	Use of existing communication channels: assemblies and documents for investors



Suppliers	Inform	supply chain requirements/policy as a result of the project - and align it with their priorities Inform about the project	News on the website
Сарриол		and potential new sustainability requirements that may be required to suppliers	Update of the supplier policy document if needed
Public administrations (local)	Collaborate	Keep informed about the benefits of the project at local, regional and national level and find synergies with development plans and strategies	 Direct communication: Dedicated dossier with information about the project Open door event: Presentation of the new plant and the project implications and benefits Meetings and site visits with City Council to update on project progress
Local communities	Involve	Inform about the project and potential impacts and benefits	 Direct communication: Dedicated leaflet (easily understandable language) Open door events: Presentation of the new plant and the project implications and benefits Indirect communication: News in local/regional media

COMMUNICATION ACTIVITIES TO BE IMPLEMENTED

The following table summarises the main communication activities that may be implemented during the first engagement phase, from February to June 2023:

Stakeholder group	Communication action	Responsible in the quarry	Indicator
Employees	A. Presentation of project and monthly updates in meetings with coordinators/managers B. Development of poster/communication material about the project to inform employees (one describing WPs and other about goals, actions and timeframe)	Quarry HR department/comm unication department	1 monthly meeting informing about project updates 2 posters developed and displayed in 2 sites (Fenouillet and Carbonne)



Clients	inform about the participation in the project: A. Train the commercial staff on the project and benefits for the future sustainability of the business activity B. Inform clients about the project and the sustainable supplier requirements/policy as a result of the project	Commercial department/Comm unication department/market ing department	1 Training conducted 1 message elaborated 50% of clients informed about the project
Investors	A. Elaboration of a summary/document summarising the outcomes of the project-including sustainable supply chain policy- to be presented to investors	Communication department	1 message elaborated 50% of investors informed about the project
Suppliers	A. Elaboration of a news/update on the project and sustainability objectives B. Elaboration of a short message to be included in a mail	Communication department	1 news on the website 1 message in regular mails
Public administratio ns	A. Elaboration of a communication dossier, with specific information of projects' impact in the territory B. Organisation of an open-door event to present the new plant and the project implications and benefits C. Meetings with City Council to update on project progress	Communication department/public affairs	1 dossier for public authorities 1 information meeting organised 1 site visit organised
Local communities	A. Elaboration of a leaflet or postcard explaining the project and new extraction techniques B. Appoint a local community relations manager C. Organisation of Open-door events to present the new plant and the project impacts and benefits D. Publication of one news in local/regional media	Quarry manager/communication department	1 leaflet/postcard 1 person appointed as community relations manager 1 open-door event organised 1 contact form created 1 news published in local/regional media



4.2 Communications and Social Awareness plan – HANSON

Background information to develop the Communications and Social Awareness plan

Stakeholder classification of VALDILECHA quarry (D 7.1) (Scale: 0-3)

ICON	Stakeholder	Influence	Interest/impact
	Employees	2	2
	Clients	1	0
	Investors	3	3
	Suppliers	1	1
1	Public administration (local)	2	3
A A	Local communities	1	1

Evaluation of social risks of VALDILECHA quarry (D7.2)

SDG	PO	TENTIAL RISKS	STAKEHOLDER INVOLVED	RS
SDG 3	7	Expose workers to risks of fatal accidents, injuries and physical and mental health problems	Employees	12
SDG 5	13	Discriminate against women applicants in recruitment processes	Employees, Local community	9
	14	Discriminate against women workers in professional development processes	Employees, Local community	9
SDG 13	49	Disturb ecosystems and exacerbate deforestation	Local community	9
SDG 2	6	Leave post-mining land in an unproductive state, due to inadequate rehabilitation	e, Local community	
SDG 3	8	Expose mining-affected communities to health and safety risks	Local community	8
SDG 6	20	Fail to provide appropriate sanitation facilities for workers	Employees	6
SDG 7	21	Increase competition for grid-based power	Local community	6
SDG 11	39	Destroy or compromise cultural and natural heritage	Local community	6
	41	Pollute air, land and water	Local community	6
SDG 12	43	Disincentivise transition to recycling and a circular economy	Local community	6
	44	Inadequately address waste management, tailings management and pollution prevention	Local community, Public Authorities	6



SDG 13	48	Exacerbate climate change impacts on populations and environments	Local community	6
SDG 15	54	Degrade ecosystems and harm biodiversity due to mining operation footprints and pollution		6
	56	Facilitate access to illegal activities including Local community deforestation and poaching		6
	57	Leave long-term environmental problems due to local community inadequate rehabilitation		6
SDG 16	60	Exacerbate risk of bribery and corruption	Local community, Public Authorities	6

Based on the influence each stakeholder exerts on the quarry's activity and the impact they may have from it, including the main social risk, the following matrix has been built to set the engagement objectives for each group:





INTEREST/IMPACT

Communication and awareness plan - HANSON-VALDILECHA

In the case of Valdilecha it is important to highlight that due to the change of ownership of the HANSON quarry and with the purpose of not causing any detriment between the stakeholders and the new owners of the quarry, the Valdilecha pilot will maintain a low degree of interaction with the local stakeholders during transfer of ownership, this is, during the first semester of the year 2023.

COMMUNICATION GOALS, STRATEGIES, CHANNELS AND TOOLS

The following table summarises the communication goals, strategies, channels and tools to be implemented with each stakeholder group:

Stakeholder	Engagement	Communication goal	Channel/tool
group	objective		



GA # 101003750

31 January 2023

Page 20 of 37



Employees	Collaboration	Inform about the DIGIECOQUARRY project	Quarry's internal communication channels: • Regular updates on the project during the health and safety meetings with employees
Clients	Inform	Inform about the benefits of DIGIECOQUARRY in the final product – aligned with their business priorities	Use of existing communication channels: • Short news in newsletters/mailings (if existing)
Investors	Collaborate1	Inform about the benefits of DIGIECOQUARRY for the future sustainability of the business activity— aligned with their investment priorities	 Use of existing communication channels (assemblies) Dedicated leaflets/diagram informing about the innovations of the project and its consequences in the business development
Suppliers	Inform	Inform about the project and potential new sustainability requirements that may be required to suppliers	 News on the website Update of the supplier policy document if needed
Public administrations	Consult/collaborate	Keep informed about the benefits of the project at local level and find synergies with development plans and strategies, specifying the collaboration framework	Direct communication: Dedicated dossier with information about the project Meetings with Valdilecha City Council Site visits of Valdilecha City Council
Local communities	Inform	Inform about the project and potential impacts	Direct communication: Open doors events: Quarry Life Awards; Tree Day Celebration; Open Doors Day Indirect communication: News in regional media

 $^{{\}scriptstyle 1}$ To be checked considering the change of ownership of the quarry



COMMUNICATION ACTIVITIES TO BE IMPLEMENTED

The following table summarises the main communication activities to be conducted. In the specific case of Valdilecha and, as we mentioned before, the schedule of the activities will be postponed until the ownership change process finalised.

Stakeholder group	Communication action	Responsible in the quarry	Indicator
Employees	A. Regular updates of the project during health and safety internal meetings with employees	Quarry HR department/comm unication department	1 project update in regular H&S meetings
Clients	Elaboration of a short news or message to inform about the participation in the project: A. To be sent as part of regular mailings	Communication department/market ing department	1 message elaborated 50% of clients informed about the project
Investors	A. Elaboration of a summary/document summarising the outcomes of the project, to be sent/presented to investors	Communication department	1 message elaborated 50% of investors informed about the project 1 poll/questionnaire to understand invertors expectations about the DIGIECOQUARRY project
Suppliers	A. Elaboration of a news/update on the project and sustainability objectives B. Elaboration of a short message to be included in a mail	Communication department	1 message in regular mails
Public administratio ns	A. Elaboration of a communication dossier, with specific information of projects' impact in the territory B. Organisation of a meeting with public authorities to inform about the project and answer their questions C. Organisation of a site visit for public authorities to see project's implementation in the site.	Communication department/public affairs	1 dossier for public authorities 1 information meeting organised 1 site visit organised



Local communities	A. Organisation of Quarry Life Awards B. Organisation of Tree Day Celebration to schoolchildren C. Organisation of Open Doors Day to schoolchildren	Quarry manager/communication department	1 Quarry Life Awards celebrated 1 Tree Day Celebration organised 1 Open Doors Day organised 1 news published in regional media
	D. Publication of one news in regional media		

4.3 Communications and Social Awareness plan – HOLCIM

Background information to develop the Communications and Social Awareness plan

Stakeholder classification of MILANO quarry (D 7.1) (Scale: 0-3)

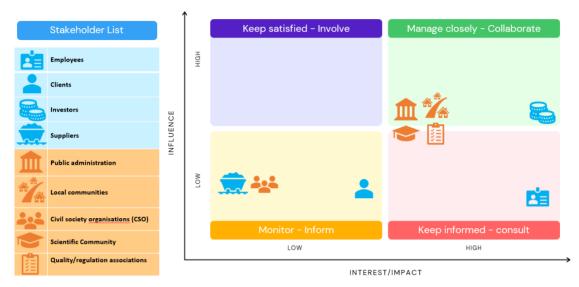
ICON	Stakeholder	Influence	Interest/impact
	Employees	1	3
	Clients	1	2
	Investors	2	3
	Suppliers	1	1
	Public administration (local)	2	2
	Local communities	2	2
	Civil society organisations (CSO)	1	1
	Scientific community	2	2
麵	Quality/regulation assotiations	2	2

Evaluation of social risks of MILANO quarry (D7.2)

SDG	PO	TENTIAL RISKS	STAKEHOLDER INVOLVED	ı
SDG 11		Heavy traffic in / out of the quarry *	Local community	
SDG 3	7	Expose workers to risks of fatal accidents, injuries and physical and mental health problems	Employees	
	8	Expose mining-affected communities to health and safety risks	Local community	•
SDG 16	64	Lack of a good regulatory framework that may cause delays or bottlenecks in the administrative and licensing procedures for the quarries' operations	Public Authorities	:



Based on the influence each stakeholder exerts on the quarry's activity and the impact they may have from it, including the main social risk, the following matrix has been built to set the engagement objectives for each group:



Communication and awareness plan - HOLCIM - MILANO

COMMUNICATION GOALS, STRATEGIES, CHANNELS AND TOOLS

The following table summarises the communication goals, strategies, channels and tools to be implemented with each stakeholder group:

Stakeholder group	Engagement objective	Communication goal	Channel/tool
Employees	Consult	Inform about the DIGIECOQUARRY project	Quarry's internal communication channels: Regular updates on the project
Clients	Inform	Inform about the benefits of DIGIECOQUARRY in the final product – aligned with their business priorities	Use of existing communication channels: • Short news in newsletters/mailings (if existing)
Investors	Collaborate	Inform about the benefits of DIGIECOQUARRY for the future sustainability of the business activity— aligned with their investment priorities	 Use of existing communication channels (assemblies) Dedicated leaflets/diagram informing about the innovations of the project and its consequences in



Suppliers	Inform	Inform about the project and potential new sustainability	the business development News on the website Update of the supplier policy document if
		requirements that may be required to suppliers	needed
Public administrations	Consult/collaborate	Keep informed about the benefits of the project at local level and find synergies with development plans and strategies, specifying the collaboration framework	Direct communication: Dedicated dossier with information about the project Meetings Site visits Open door events
Local communities	Consult/collaborate	Inform about the project and potential impacts	Direct communication: Dedicated leaflet (easily understandable language) Contact person provided on the website Open-door events Indirect communication: News in local/regional media
CSOs	Inform	Offer transparent and updated information about the project	Dedicated document/information in the corporate website (sustainability section)
Scientific community	Consult/collaborate	Inform about project results and engage them in consultation to improve results implementation	Direct communication: • Mailing to identified scientific organisation
Quality/regulation associations	Consult/collaborate	Inform about project results and engage them in consultation to standardise project results	Direct communication: • Mailing to identified associations

COMMUNICATION ACTIVITIES TO BE IMPLEMENTED

The following table summarises the main communication activities that may be implemented during the first engagement phase, from February to June 2023:



Stakeholder group	Communication action	Responsible in the quarry	Indicator
Employees	A. Creation of a site within HOLCIM website dedicated to the project to offer regular updates about the project progress B. Monthly updates of the project (mailing or post in the site) C. Provision of a contact person in the site for questions and suggestions	Quarry HR department/comm unication department	1 internal site created 1 post every 2 months 1 contact person provided
Clients	Elaboration of a short news or message to inform about the participation in the project: A. To be sent as part of regular mailings	Communication department/market ing department	1 message elaborated 50% of clients informed about the project
Investors	A. Elaboration of a summary/document summarising the outcomes of the project, to be sent/presented to investors	Communication department	1 message elaborated 50% of investors informed about the project 1 poll/questionnaire to understand invertors expectations about the DIGIECOQUARRY project
Suppliers	A. Elaboration of a news/update on the project and sustainability objectives B. Elaboration of a short message to be included in a mail or be communicated by quarry employees	Communication department/purcha sing department	1 message in regular mails
Public administratio ns	A. Elaboration of a communication dossier, with specific information of projects' impact in the territory B. Organisation of a meeting with public authorities to inform about the project and answer their questions C. Organisation of a site visit for public authorities to see project's implementation in the site.	Communication department/public affairs	1 dossier for public authorities 1 information meeting organised 1 site visit organised 1 open-door event organised



	D. Organisation of an open-door event		
Local communities	A. Elaboration of a leaflet or postcard explaining the project and new extraction techniques B. Provision of a contact person for questions and suggestions (form on the website) C. Confirmation of local communities to be consulted/informed about the project D. Publication of one news in local/regional media	Quarry manager/communication department	1 leaflet/postcard 1 contact person provided 1 news published in local/regional media Neighbours willing to be informed and participated in the definition of the SLO concept
CSOs	Regular updates and information about the project in the corporate website (sustainability section)	Communication/sus tainability department	2 news/updates published 1 mailing informing about the project
Scientific community	Elaboration of a mailing and summary informing about the project and ask for its interest to offer feedback/advise about project results	Communication department/innova tion department	1 mailing sent Xx researchers confirm interest to receive information about the project and being consulted.
Quality/regul ation associations	Elaboration of a mailing and summary informing about the project and ask for its interest to offer feedback/advise about project results	Communication department/innova tion department	1 mailing sent 3 identified organisations confirm interest to receive information about the project and being consulted.

4.4 Communications and Social Awareness plan – CSI

Background information to develop the Communications and Social Awareness plan

Stakeholder classification of MAMMENDORF quarry (D 7.1) (Scale: 0-3)



ICON	Stakeholder	Influence	Interest/impact
	Employees	1	2
	Clients	1	1
	Investors (family owned)	3	3
	Suppliers	1	2
1	Public administration (local)	3	3
**	Local communities	3	3
	Civil society organisations (CSO)	3	2
	Scientific community	2	2

Evaluation of social risks of MAMMENDORF quarry (D7.2)

One additional risk that has also arise during this task is the risk of local quarries to stop their economic activity due to depletion of raw material resources (SDG 8. Decent work and economic growth) arising from ever growing legislative and administrative framework and on national and European level, specifically concerning environmental legislation that result in increasingly long and heavy administrative processes to acquire permissions for mining. Closure of local quarry sites is related to increased environmental impact (increase in transportation of materials) and a negative impact on local economies (local communities, CSOs, public authorities, employees, suppliers, clients, investors).

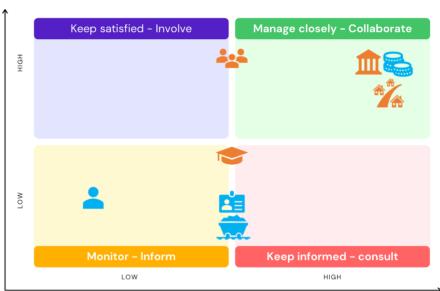
SDG	POTENTIAL RISKS		STAKEHOLDER INVOLVED
SDG 7 Affordable and clean energy	23	Slow down move towards renewable energy sources	Local community
Responsible consumption and production	44	Inadequately address, tailings management and pollution prevention	Local community, Public Authorities
SDG 8 Decent work at economic grow		Risk of stopping economic activity due to rising legal and administrative barriers in approval procedures for quarry enlargements*	Employees, Clients, Investors, Suppliers, Local communities, Civil society organizations

RS*
6

Based on the influence each stakeholder exerts on the quarry's activity and the impact they may have from it, including the main social risk, the following matrix has been built to set the engagement objectives for each group:







INTEREST/IMPACT

Communication and awareness plan - CSI - MAMMENDORF

COMMUNICATION GOALS, STRATEGIES, CHANNELS AND TOOLS

The following table summarises the communication goals, strategies, channels and tools to be implemented with each stakeholder group:

Stakeholder group	Engagement objective	Communication goal	Channel/tool
Employees	Inform/consult	Inform about the DIGIECOQUARRY project, identify any potential negative perception about changes in daily activities	Quarry's internal communication channels: Regular updates on the project
Clients	Inform	Inform about the benefits of DIGIECOQUARRY in the final product – aligned with their business priorities	Use of existing communication channels: • Short news in newsletters/mailings (if existing)
Investors	Collaborate	Inform about the benefits of DIGIECOQUARRY for the future sustainability of the business activity— aligned with their investment priorities	 Use of existing communication channels (assemblies) Dedicated leaflets/diagram informing about the innovations of the project and its consequences in the business development



Suppliers	Inform	Inform about the project and potential new sustainability requirements that may be required to suppliers	 News on the website Update of the supplier policy document if needed
Public administrations	Collaborate	Keep informed about the benefits of the project at local level and find synergies with development plans and strategies, specifying the collaboration framework	Direct communication: Dedicated dossier with information about the project Meetings Site visits
Local communities	Collaborate	Inform about the project and potential impacts	Direct communication: Dedicated leaflet (easily understandable language) Indirect communication: News in local/regional media
CSO	Involve/collaborate	Inform about the project and its impact in the territory and engage CSOs in increasing benefits for the community, as well as avoiding opposition to the project.	Direct communication:
Scientific community	Inform/Consult	Inform about project results and engage them in consultation to improve results implementation	Direct communication: • Mailing to identified scientific organisations

The following table summarises the main communication activities that may be implemented during the first engagement phase, from February to June 20232:

Stakeholder group	Communication action	Responsible in the quarry	Indicator
Employees	A. Monthly updates of the project (mailing or informal meetings, post) B. DIGIECOQUARRY project site created on CSI website	Quarry HR/management department	100% of workers are updated about the project 1 project site created on website

² All the activities will be reviewed and approved following each quarries/companies' communication and relationships strategies and policies, and the proposed actions will be continuously updated to ensure their effectiveness.



Clients	Elaboration of a short news or message to inform about the participation in the project: A. To be sent as part of regular mailing	Quarry management department	1 message elaborated Clients informed about the project
Investors	A. Elaboration of a summary/document summarising the outcomes of the project, to be sent/presented to investors	Owners (family owned company)	1 message elaborated 100% of investors informed about the project 1 informal meeting with investors to identify their expectations about the DIGIECOQUARRY project
Suppliers	A. Elaboration of a short message to be included in a mail	Quarry management department	1 message in regular mails
Public administratio ns	A. Elaboration of a communication dossier, with specific information of projects' impact in the territory B. Organisation of a meeting with public authorities to inform about the project and answer their questions C. Organisation of a site visit for public authorities to see project's implementation in the site.	Quarry management department	 1 dossier for public authorities 1 information meeting organised 1 site visit organised
Local communities	A. Elaboration of a leaflet or postcard explaining the project and new extraction techniques B. Confirmation of local communities to be consulted/informed about the project C. Publication of one news in local/regional media	Quarry management department	1 leaflet/postcard 1 news published in local/regional media Neighbours willing to be informed and participated in the definition of the SLO concept.
CSOs	A. Elaboration of a leaflet/summary explaining the project and its impact in sustainability B. Invitation for CSOs to offer feedback and suggestions to increase	Quarry management department	1 information mailing sent 100% of impacted associations (local level) contacted



	project's benefit for local communities		Associations confirm their interest to received information about the project and make suggestions
Scientific community	Elaboration of a mailing and summary informing about the project and ask for its interest to offer feedback/advise about project results	Quarry management department	1 mailing sent

4.5 Communications and Social Awareness plan – CIMPOR

Background information to develop the Communications and Social Awareness plan

Stakeholder classification of ALENQUER quarry (D 7.1) (Scale: 0-3)

ICON	Stakeholder	Influence	Interest/impact
	Employees	3	2
	Clients	3	1
	Investors	2	1
	Suppliers	2	1
1	Public administration	3	0
***	Local communities	0	2
	Civil society organisations (CSO)	1	0

Evaluation of social risks of ALENQUER quarry (D7.2)

SDG	POTENTIAL RISKS		STAKEHOLDER INVOLVED
SDG 8		Unemployment due to operation ending*	Local community
SDG 3 7 Expose workers to risks of fatal accidents, injuries and physical and mental health problems		Expose workers to risks of fatal accidents, injuries and physical and mental health problems	Employees
SDG 6 18 Exacerbate water stress by competing for water supply		, ,	Local community

Based on the influence each stakeholder exerts on the quarry's activity and the impact they may have from it, including the main social risk, the following matrix has been built to set the engagement objectives for each group:







INTEREST/IMPACT

Communication and awareness plan - CIMPOR

COMMUNICATION GOALS, STRATEGIES, CHANNELS AND TOOLS

The following table summarises the communication goals, strategies, channels and tools to be implemented with each stakeholder group:

Stakeholder group	Engagement objective	Communication goal	Channel/tool
Employees	Collaboration	Inform about the DIGIECOQUARRY project and set the basis for fluent bi-directional communication	Quarry's internal communication channels: Dedicated site in the intranet Regular updates on the project Bi-directional communication channel
Clients	Involve	Inform about the benefits of DIGIECOQUARRY in the final product — aligned with their business priorities	Use of existing communication channels: Short news in newsletters/mailings (if existing) Informal and direct information by commercial staff
Investors	Inform	Inform about the benefits of DIGIECOQUARRY for the future sustainability of the business	Use of existing communication channels (assemblies)



Suppliers	Inform	activity— aligned with their investment priorities Inform about the project and potential new sustainability requirements that may be required to suppliers	 Dedicated leaflets/diagram informing about the innovations of the project and its consequences in the business development News on the website Update of the supplier policy document if needed
Public administrations	Involve	Keep informed about the benefits of the project at local, regional and national level and find synergies with development plans and strategies	Direct communication: Dedicated dossier with information about the project Meetings Site visits
Local communities	Consult	Inform about the project and potential impacts and start a bi-directional communication process	Direct communication: Dedicated leaflet (easily understandable language) Mailbox for suggestions on the website Designed community relations manager in the quarry Indirect communication: News in local/regional media
CSOs	Inform	Offer transparent and updated information about the project	Dedicated document/information in the corporate website (sustainability section)

The following table summarises the main communication activities that may be implemented during the first engagement phase, from February to June 20233:

³ All the activities will be reviewed and approved following each quarries/companies' communication and relationships strategies and policies, and the proposed actions will be continuously updated to ensure their effectiveness.



Stakeholder group	Communication action	Responsible in the quarry	Indicator
Employees	A. Creation of a site dedicated to the project to offer regular updates about the project B. Monthly updates of the project (mailing or post in the site) C. Creation of a mailbox or communication channel in the site for questions and suggestions	Quarry HR department/comm unication department	1 internal site created 1 post every 2 months 1 mailbox/communication channel created
Clients	Elaboration of a short news or message to inform about the participation in the project: A. To be sent as part of regular mailings B. To be used by commercial staff when communicating with clients	Communication department/market ing department	1 message elaborated 50% of clients informed about the project
Investors	A. Elaboration of a summary/document summarising the outcomes of the project, to be sent/presented to investors	Communication department	1 message elaborated 50% of investors informed about the project
Suppliers	A. Elaboration of a news/update on the project and sustainability objectives B. Elaboration of a short message to be included in a mail	Communication department	1 news on the website 1 message in regular mails
Public administratio ns	A. Elaboration of a communication dossier, with specific information of projects' impact in the territory B. Organisation of a meeting with public authorities to inform about the project and answer their questions C. Organisation of a site visit for public authorities to see project's implementation in the site.	Communication department/public affairs	1 dossier for public authorities 1 information meeting organised 1 site visit organised
Local communities	A. Elaboration of a leaflet or postcard explaining the project and new extraction techniques B. Appoint a local community relations manager	Quarry manager/ communication department	1 leaflet/postcard 1 person appointed as community relations manager 1 contact form created



	C. Creation of a contact point for questions and suggestions (form in the website) D. Publication of one news in local/regional media		1 news published in local/regional media
CSO	Regular updates and information about the project in the corporate website (sustainability section)	Communication/sus tainability department	2 news/updates published 1 mailing informing about the project

5 Conclusions

As main conclusions of D7.3 we can determine that the contexts and realities of each pilot is very different from each other, observing different levels of interaction with their own stakeholders. However, we can identify two main focuses: on one hand, the employees, as the main internal stakeholders, and on the other, the public authorities, especially the local ones, and the local communities, as the most relevant stakeholders at external level, and those that all sites should take into account when developing their own engagement and communication strategies. Furthermore, investors are increasingly taking into account sustainability criteria in their investment decisions and therefore are also becoming very relevant in the mining sector when mapping the key stakeholders.

Lastly, we can also conclude that there are some quarries that are already carrying out engagement activities with their local stakeholders. However, what is missing is to structure and give coherence to these individual actions.

Within this context, these communication and engagement actions are ultimately bringing research projects closer to both internal and external stakeholders and add value the global commitment to sustainability.



6 Annex: Best Practices on Community Engagement

ANNEX 1. GOOD PRACTICES ON COMMUNITY ENGAGEMENT

lΑ	NNEX	1. GOOD PRACTICES ON COMMUNITY ENGAGEMENT	1
	1. CON	New Gold's Community Engagement Efforts for the New Afton Mine (21) – PUBLIC SULTATION	2
	2. COM	Disclosure of air quality monitoring data to communities – IMUNICATION/TRANSPARENCY	3
	3. Resp	Prospectors & Developers Association of Canada's e3 Plus: A Framework for bonsible Exploration – DIGITAL TOOLKIT	3
	4.	La Granja Project: Land access planning strategy	4
	5.	Reconciliation Action Plans and indigenous engagement strategies	4
	6.	Zero hunger: Crop nutrition project	5
	7.	Good health and wellbeing: HIV/AIDS prevention programme	5
	8.	Clean water and sanitation: CAP Desalination Water Plant	6
	9.	Decent work: Anglo American's Avançar Program	6
	10.	Supporting local economic development: local procurement plans	7
	11.	Responsible consumption and production: Goldcorp's Tailings Stewardship Strateg	y 7
	12.	Conservation and restoration of terrestrial ecosystems: Ambatovy Project	8
	13.	Conservation and restoration activities in the whole mineral development sequence	:e8
	14.	Towards Sustainable Mining (TSM) in Canada	9
	15.	Fight against corruption and promotion of transparency	9
	16.	Supporting national skills development	10
	17.	Transparency of worker grievance mechanisms	10
	18.	Public disclosure of community fatalities and injuries	11
	19.	Take systematic action on gender: Gender-appropriate PPE	11
	20.	Mine closure management standard	12
RE	EFERE	NCES	13

Title	1. New Gold's Community Engagement Efforts for the New Afton Mine (21) – PUBLIC CONSULTATION
Leading organisation	New Gold Inc.
Site	New Afton mine
Location, Country	Kamloops, British Columbia, Canada
Area	61 claims on 12,450 hectares (124.5 km2) of property
Type of quarry	underground
Number employees	744 (2022)
Opened	2012
Products	gold, silver, copper
Production	79 million pounds copper and 69,000 ounces gold (2019)
Stage of the mineral	Exploration, development, operation
development sequence	
Type of stakeholders	Local communities
involved	Public Authorities
Resources	- First Nation and public consultation: workshops and
	engagement sessions, meetings with elders and youth
	- Environmental studies: committee approval, public review,
	comment period, open house, and 30-day review period
	followed by further public consultation and review, and a more
	formal consultation
Staff	- Company's own staff + collaborators

In 2008, the New Afton Project's review and approval included First Nation and <u>public consultation</u> and environmental studies, despite not being a reviewable project under the *Canadian Environmental Assessment Act, 2012* as the amount of land to be disturbed fell below the Environmental Assessment threshold. During New Gold's early engagement with the local communities, discussions focused on the impact of the mine, exploration, and the investment strategy and capital plan of the company. Workshops and engagement sessions addressed community concerns such as the environment, respect of traditional territory during mine development, employment and contracting opportunities, and financial benefits.

Results	New Afton's efforts to voluntarily conduct an environmental review and consultation resulted in the attainment of social license and increased support from local communities and enabled the development of employment strategies. This included addressing concerns surrounding water and acid drainage. The Participation Agreement helped to secure the support and partnership of local First Nations and local vendors. Currently, 23% of employees are Indigenous. New Afton's priority for local vendors has resulted in an
	influx of approximately \$47 million to Kamloops businesses and suppliers in 2015. Recognition and awards: - 2013 Viola R. MacMillan Award from the Prospectors & Developers Association of Canada - Recognized by the two leading social responsibility rankings in
	Canada In 2015 one of Canada's 50 Most Socially Responsible Corporations by Sustainalytics (responsible mining)
Lessons learned	Although the New Afton Project was not reviewable under the federal <i>Canadian Environmental Assessment Act</i> , the company still conducted extensive environmental studies and consulted with First Nations, which created trust and led to strong relationships with local communities.

Title	2. Disclosure of air quality monitoring data to communities – COMMUNICATION/TRANSPARENCY
Leading organisation	Glencore
Site	Mount Isa Mines Limited ("MIM")
Location, Country	Mount Isa, Queensland, Australia
Opened	1924
Products	copper, zinc, lead, silver
Stage of the mineral development	operation
sequence	
Type of stakeholders involved	Local community
Resources	
Staff	Own staff + consultancy
Economic	Digital tool development
Type of quarry	underground mines, mineral processing and smelting
	operations, power generation
Dutof describetors	

MIM conducts copper and lead–zinc–silver mining and processing operations adjacent to the City of Mount Isa. These operations generate dust and metallurgical fumes that can contain heavy metals such as copper, lead, zinc and cadmium, as well as 'metalloids' such as arsenic and silicon. In 2015, Glencore's Mount Isa Mines (MIM) in Australia **developed two tools** to provide the Mount Isa community with clear information about the site's air quality management. MIM created a smartphone app and an online real-time air quality portal to give the community access to Glencore's comprehensive air quality monitoring network. These tools provide information on the site's SO2 management activities, with air quality data uploaded hourly.

Lessons learned	MIM is an example of communication and transparency with
	local communities by engaging with them on important issues,
	such as air quality, and publicly disclosing air quality data in near
	real-time.

Title	3. Prospectors & Developers Association of Canada's e3 Plus: A Framework for Responsible Exploration – DIGITAL TOOLKIT
Leading organisation	Prospectors & Developers Association of Canada (PDAC)
	Association with over 8,000 members around the world, and whose mission is to promote a globally responsible and sustainable minerals industry.
Stage of the mineral development	Exploration
sequence	
Type of stakeholders involved	Employees
Type of quarry	All
Brief description	

Online information resource to help companies exploring for minerals improve their social, environmental, and health and safety performance launched in 2009. The information can be tailored to the size of the company, the stage of exploration being undertaken, the type and location of the project and the political and cultural milieu within which the company is operating. It contains:

- Community Engagement Guide
- Principles & Guidance Notes
- Toolkits (Environmental Stewardship, Health & Safety, Social Responsibility)

The excellence in Health & Safety (EHS) e-toolkit addresses General Safety Principles, Emergency Response, Survival, Weather & Environmental Risks.

https://www.pdac.ca/priorities/responsible-exploration/e3-plus

https://www.pdac.ca/priorities/responsible-exploration/e3-plus/toolkits/health-and-safety

Lessons learned	Good community engagement and environmental and social
	responsibility starts at the exploration stage. e3 Plus has
	provided the mineral exploration and development

community with information and guidance on how to operate responsibly and voluntarily improve practices in relation to environmental stewardship, social responsibility, community engagement and health and safety. Such work demonstrates the beneficial practice of compiling and promoting leading practices to promote improved performance in areas such as the assessment and reduction of risks, the minimization of impacts (social and environmental), and the optimization of benefits to all involved – local communities, the host country, investors and the company.

Title	4. La Granja Project: Land access planning strategy
Leading organisation	Rio Tinto Minera Peru's (RTMP)
Site	La Granja
Location, Country	Cajamarca region, Province of Chota, Northern Peru
Products	copper ore
Stage of the mineral development	Exploration, Development
sequence	
Type of stakeholders involved	local communities
Type of quarry	All
Brief description	

Rio Tinto Minera Peru's La Granja Project built a strategy to secure consensual, permanent land access for the future construction of the mine. It developed an approach that integrated and aligned the business and project schedule with a responsible approach to engagement and agreement-making on land access. The company worked with local communities to design and implement an engagement process to discuss the possibility of land acquisition and resettlement if the project proceeded and agree on general terms and principles that would be applied in future negotiations. During the process, community members had the opportunity to share their concerns, fears and interest in considering the possibility of resettlement. The process also yielded critical information for the company on the likelihood and potential costs of land acquisition and resettlement.

likelihood and potential costs of land acquisition and resettlement.		
Lessons learned	For RTMP, the dialogue process delivered positive results. The	
	company and the communities had an opportunity to have a	
	robust conversation on what land acquisition and resettlement	
	could look like, especially from a comprehensive livelihoods	
	perspective and not just as a transaction to exchange assets and	
	rights for cash. Early up-front planning helped RTMP respond to	
	changing concerns, expectations and unanticipated fears, while	
	maintaining a focus on the strategic objective to achieve a	
	consensual framework for future land access. The process	
	established a framework for resettlement planning and	
	compensation that is essential to both RTMP's financial	
	evaluations and family decisions to sell land and resettle.	

Title	5. Reconciliation Action Plans and indigenous engagement strategies
Leading organisation	BHP Billiton
Site	Western Australian Iron Ore
Location, Country	Pilbara region, Western Australia
Products	Iron ore
Stage of the mineral development	Development, Operation
sequence	
Type of stakeholders involved	Indigenous communities
Type of quarry	All

BHP Billiton awarded over US\$73 million in Western Australian Iron Ore Indigenous Business Contracts during 2015, assigning over US\$400 million in contracts over the past three years. Indigenous contracting is built into many of the mining majors' Reconciliation Action Plans and indigenous engagement strategies. The company requires contractors to have a certain level of capacity and, with many indigenous businesses still growing, joint ventures are often the best option for indigenous businesses to win high-profile work and to build their capacity. Additionally, the company has provided over 145 traineeships and apprenticeships during this period and currently employs over 940 people identifying as Aboriginal or Torres Strait Islanders.

	0.00.00.00.00.00.00.00.00.00.00.00.00.0
Lessons learned	BHP wants to do much more to build sustainable, profitable and
	enduring partnerships with Indigenous businesses across our
	operations. Contracts like this support the growth of
	Indigenous enterprise and innovation and create new
	opportunities for those businesses to support their own
	communities.

Title	6. Zero hunger: Crop nutrition project
Leading organisation	Teck Resources Limited
Location, Country	Northeastern Heilongjiang Province, China
Products	zinc
Stage of the mineral development	Development, Operation
sequence	
Type of stakeholders involved	local communities
Type of quarry	All
Brief description	

Teck, one of the world's largest producers of zinc, supports an innovative crop nutrition project with China's Ministry of Agriculture and the International Zinc Association to promote sustainable agriculture. Adding zinc to fertilizer has been demonstrated to increase crop output, improve food security and increase the nutritional quality of crops. Nearly 45% of children in China suffer from zinc deficiency and do not get enough nutrients in their diet. By reaching the company's target of increasing zinc usage in fertilizer by 20,000 tons in 2016, approximately six million children in China will see improved zinc nutrition. The Teck and NATESC partnership will build on this work by providing a total of \$500,000 in matching funds from both Teck and NATESC to conduct up to a further 50 field trial demonstration projects and promote widespread education on the benefits of zinc fertilizer.

Lessons learned	This	initiative	improves	food	security,	nutrition	and
	susta	inable agri	culture, in a	dditior	to creatin	ng a new m	arket
	for o	ne of Teck's	products.				

Title	7. Good health and wellbeing: HIV/AIDS prevention
	programme
Leading organisation	Anglo American
Location, Country	Southern Africa
Products	platinum, thermal coal, diamonds, iron ore
Stage of the mineral development	Development, Operation
sequence	
Type of stakeholders involved	employees
Type of quarry	All
Brief description	

Anglo American is recognized as a leader in TB and HIV/AIDS management. In 2002 it was one of the first companies to introduce free anti-retrovirals to its employees and later to their dependents – a process which has had a measurable and positive impact on the physical, social and emotional welfare of its employees and on its business performance. In 2015, 68% of Anglo American's employees in

southern Africa participated in HIV testing and testing and treatment of TB has also succeeded in reducing the TB incidence rate. To address this, Anglo American is participating in a public-private sector partnership with UNAIDS which promotes HIV testing worldwide. During the AIDS 2016 International Aids Conference, this partnership reached over six million people on social channels and – via the #ProTESTHIV and #GenEndIt campaigns – achieved over 100,000 protests on the ProTESTHIV web site.

Lessons learned	The HIV/AIDS prevention programme has been running for 20 years. The benefits of addressing HIV in the workplace with testing can have a ripple effect: not only on the individual by improving the lives of those infected, their families, co-workers, and the population at large, but also their performance and dedication at work. A prevention programme is also important to prevent new cases from occurring. Effective treatment programmes also help to maintain morale among staff members,
	programmes also help to maintain morale among staff members, even if HIV is not directly affecting a person's own health, it can have a huge impact on every one of our daily lives.

Title	8. Clean water and sanitation: CAP Desalination Water Plant
Leading organisation	CAP Minería
Site	Cerro Negro Norte
Location, Country	Northern Chile
Products	Iron ore
Stage of the mineral development	Development, Operation
sequence	
Type of stakeholders involved	Employees, local communities
Type of quarry	All
Brief description	

CAP Minería operates in three valleys of northern Chile - Copiapó, Elqui and Huasco - which suffer from water shortages. Given the delicate water situation in the Valley of Copiapo and in order to achieve growth of the company in the area, CAP's Cerro Negro Norte project is supplied with recycled desalinated water for their processes, from the CAP Desalination Water Plant located in the Caldera commune. The wastewater from the filtering process is recovered 100% and sent by an aqueduct back to the operation. This enables the emissary of the port to be used only for emergencies, preventing use of 900,000 cubic meters of sea water per year. In addition, the Black Mountain North operation uses Thicken Tailings Disposal (TTD) or thickened tailings technology. The recovery efficiency of water is bish density thickened; in process the province of the position of the posit

in high density thickeners is greater than 98%, compared to 90-95% in a conventional thickener			
Lessons learned	The project has been fully operational since December 2016, with a current water production rate of 370 liters per second.		
	The desalination plant provides water for CAP's mining		
	activities in the region, its Punta Totoralillo port, and for other		
	off-takers, which include local communities. Apart from		
	producing desalinated water, the project also provides		
	recycled water to CAP's CNN mine. Its economic life is		
	currently expected to last until 2034, although it could be		
	extended beyond that. Such an extension could accompany a		
	potential expansion of the desalination plant's water		
	production rate to 600 liters per second.		

Title	9. Decent work: Anglo American's Avançar Program
Leading organisation	Anglo American
Site	Barro Alto
Location, Country	Goiás State, Brazil
Products	Nickel, rubber

Stage of the mineral development	Development, Operation	
sequence		
Type of stakeholders involved	local communities	
Type of quarry	All	

Anglo American's Avançar Program facilitates the transfer of long-term skills and capabilities to businesses and young adults in Brazil, creating measurable impact and self-sufficiency. In 2014 and 2015, participant businesses that wished to join the Program were invited to apply via a competitive selection process. Once selected, they undertook business advisory services to identify growth opportunities, reach new customers and markets, improve operational efficiency and obtain the resources they need to grow. A specific group of participating businesses were Anglo American local suppliers, with the objective of increasing the shared value of local procurement. By 2016, this program supported more than 150 participants from three different groups within the community: local businesses supplying to Anglo American, other rural and urban businesses, and young adults looking to launch their careers or their own enterprises.

Title	10. Supporting local economic development: local procurement plans
Leading organisation	BHP Billiton
Location, Country	Australia, Chile
Products	Iron ore
Stage of the mineral development	Development, Operation
sequence	
Type of stakeholders involved	local communities
Type of quarry	All
Brief description	

BHP Billiton implements targeted local procurement programs, improving local vendor supply chain capacity and capability while also increasing the company's indirect sphere of influence in local communities and regions as a result. BHP's operated assets develop local procurement plans designed to identify opportunities for local suppliers, including small businesses. The company requires that all operations and assets have local procurement plans. In FY2022, BHP made US\$18.8 billion in payments to suppliers globally, including US\$17.6 billion in payments to more than 8,000 suppliers in the regions where it operates. Of the latter amount, US\$2.7 billion, or 15.2 per cent, was paid to local suppliers in the communities where BHP operates. BHP's expenditure with local suppliers was primarily in Australia (59%) and Chile (30%). Of its total supplier spend, 94.4% was in the regions where it operate.

the regions where it operate.	
Lessons learned	BHP aims to source and promote locally available goods and services as an important part of its external expenditure to help local communities thrive. This way, BHP contributes to the Economic Empowerment of Indigenous peoples through investment which provides opportunities for employment, training, procurement and Indigenous enterprise support.

Title 11. Responsible consumption and production: Goldcorp's Tailings Stewardship Strategy

Leading organisation	Goldcorp
Products	gold
Stage of the mineral development	Development, Operation
sequence	
Type of stakeholders involved	Employees, local communities
Type of quarry	All

In 2014, Goldcorp developed a tailings stewardship program to minimize tailings risks and ensure good practices for tailings construction, operation, maintenance, monitoring and, ultimately, closure and reclamation. The strategy addresses stakeholder concerns to ensure tailings facilities are well-managed, provide secure storage, reduce costs and impacts, improve operational excellence and are regularly and consistently monitored. This way, Goldcorp's operating sites ensures planning, design, construction, operation and closure of tailings storage and water retention facilities in a manner such that: structures are physically stable under all anticipated conditions; solids and water are managed within designated areas; facilities meet or exceed regulatory or standard engineering guidelines; facilities are chemically stable so that the quality of any seepage or surface runoff does not endanger human health or the environment; and facilities can be closed in a manner that is compatible with the surrounding land use and that will have a manageable impact on the environment.

Lessons learned	These programs serve to strengthen the company's social license
	to operate by establishing standards and consistency and
	enhancing community acceptance.

Title	12. Conservation and restoration of terrestrial ecosystems: Ambatovy Project
Leading organisation	Sumitomo Corporation
Country	Madagascar
Products	nickel
Stage of the mineral development	Development, Operation
sequence	
Type of stakeholders involved	local communities
Type of quarry	All
Brief description	

Sumitomo Corporation participated in the world's largest nickel mine development project in Madagascar, the Ambatovy Project, together with Sherritt International and Korea Resources Corporation. Various comprehensive conservation programs have been implemented to mitigate impacts and conserve the remaining pristine natural environments in Madagascar. These include establishing a buffer zone around the mine footprint for forest conservation and safe migration of animals into adjacent areas, propagation of plants for future restoration of the footprint, and avoidance of critical habitat by rerouting or tunneling the pipeline. The project is dedicated to the highest environmental standards in collaboration with the Madagascar government and other local and international experts such as Conservation International, Duke Lemur Center, Missouri Botanical Garden and national NGOs. In addition, as the first pilot project of the Business and Biodiversity Offsets Program, the implementation of offset activities is also underway to achieve 'No Net Loss and preferably a Net Gain of biodiversity' by conserving areas of land up to approximately 9 times the size of the mine area that contains similar biodiversity.

Lessons learned	The Ambatovy Project is one of the world's largest nickel projects
	led by an international partnership, and it is committed to
	maintaining a world-leading role in nickel production while
	focusing on safe operation, environmental conservation and
	social contribution.

Title	13. Conservation and restoration activities in the whole
	mineral development sequence
Leading organisation	Gold Corp

Country	Canada, Latin America
Products	gold
Stage of the mineral development	Exploration, development, operation, closure
sequence	
Type of stakeholders involved	local communities
Type of quarry	All

Gold Corp's goal is to develop, operate and close its mining properties in a sustainable manner. Biodiversity factors into plans prior to mine construction, through operations and after closure. Every operation has an environmental closure plan in place, which includes reclamation strategies that will leave healthy, thriving ecosystems with productive, useful land for local communities. In 2015, El Sauzal was the first mine in the world to demonstrate its successful decommissioning in accordance with the International Cyanide Management Code (ICMC). The ICMC is a voluntary industry program for companies involved in the production of gold using cyanide and it was developed under the United Nations Environment Programme with the goal of safeguarding human health and the environment by promoting responsible management of cyanide used in gold mining.

Lessons learned	Goldcorp was the first gold-mining company in the world to have
	each of its wholly owned mines certified under the ICMC and they
	have become the first to successfully decommission a gold mine
	under the auspices of the ICMC. This represents an important
	step forward in a mining company's commitment to safe,
	responsible operations throughout the entire life cycle of their
	projects.

Title	14. Towards Sustainable Mining (TSM) in Canada
Leading organisation	Towards Sustainable Mining (TSM): Mining Association of
	Canada's commitment to responsible mining
Country	Canada
Products	All
Stage of the mineral development	Exploration, development, operation, closure
sequence	
Type of stakeholders involved	Employees, local communities
Type of quarry	All
Brief description	

Brief description

To drive accountability, participation in TSM is mandatory for all Mining Association of Canada members. To ensure transparency, members commit to a set of guiding principles and report their performance against the program's 23 indicators annually. Assessments are conducted at the facility level where the mining activity takes place and results are publicly available and are externally verified every three years. Members demonstrate leadership by engaging with communities, driving world-leading environmental practices and committing to the safety and health of employees and surrounding communities. TSM includes (inter alia) an Aboriginal and Community Outreach protocol consisting of four performance indicators that seek to confirm that mining facilities have developed and implemented formal processes for engaging with communities of interest, including Aboriginal communities and organizations, affected or perceived to be affected by their operations or that have a genuine interest in the performance of a facility.

Lessons learned	TSM initiative allows mining companies to turn high-level
	environmental and social commitments into action on the
	ground. At the same time, it provides communities with valuable
	information on how operations are faring in important areas,
	such as community outreach, tailings management and
	biodiversity.

Title	15. Fight against corruption and promotion of transparency
Leading organisation	BHP Billiton

Country	worldwide
Products	Iron, steel
Stage of the mineral development	All
sequence	
Type of stakeholders involved	Employees, investors, local communities
Type of quarry	All

BHP Billiton is committed to the role transparency plays in contributing to the governance of natural resources for the benefit of the governments and citizens of host countries. BHP Billiton has been a member of the EITI since its inception and it voluntarily goes above minimum industry standards by publicly reporting on a range of topics including: payment of taxes and royalties, sustainability performance that is independently verified, and climate change portfolio analysis. In addition, the Natural Resources Governance is a Global Signature Program of the BHP Billiton Foundation which include a two-year US\$2.5 million partnership with Transparency International to deliver the 'Mining for Sustainable Development (Phase 1)' project and a two-year US\$2.8 million partnership with the World Bank delivering the 'From disclosure to development' project.

Lessons learned	Through these global partnerships targeting improvements in
	governance and transparency, BHP Billiton commits, collaborates
	and joins in the global fight against corruption and the promotion
	of ethical business conduct.

ment of the second seco	
Title	16. Supporting national skills development
Leading organisation	Eurasian Resources Group (ERG)
Country	Kazakhstan
Products	high-carbon ferrochrome producer
Stage of the mineral development	Development, operation
sequence	
Type of stakeholders involved	Employees, local communities
Type of quarry	All
Brief description	

In 2019 ERG supported the launch of an 'Atlas of New Professions', a tool developed by the International Labour Organization and the Russian Agency for Strategic Initiatives to identify and develop the most critical professions for the future. ERG undertook the first pilot study using the Atlas methodology, which led to a number of management actions including the decision to fund a new course at a local college to train operators of unmanned aerial vehicles. ERG has since rolled out the same approach to all its operations in Kazakhstan and plans to collaborate with the country's Ministry of Education and Science to adapt its recruitment and training practices and target its support to specialist educational institutions and qualifications.

Lessons learned In Kazakhstan, ERG is the pioneering organization, and one of the key players in the country's mining industry, that has officially introduced and employed this international methodology to better understand and meet its staffing needs. In the meantime,
introduced and employed this international methodology to
· ·
better understand and meet its staffing needs. In the meantime.
Atlas of New Professions does not solely confine to the mining
industry of Kazakhstan. Since ERG is a quasi-public company with
40% of its shares belonging to the government of Kazakhstan,
active political discussions have brought the project to the
nationwide level.

Title	17. Transparency of worker grievance mechanisms
Leading organisation	CODELCO and Polymetal
Products	-
Stage of the mineral development	Development, operation
sequence	
Type of stakeholders involved	Employees

Type of quarry	Al
Brief description	

CODELCO and Polymetal are among the very few companies to provide mine-site-disaggregated data on the functioning of their worker grievance mechanisms. Both companies report for each mine site the number and types of grievances raised – for example, on safety issues, living conditions, or sexual harassment. CODELCO provides further information on the outcomes of the investigations of grievances (including for example the numbers of allegations that were confirmed, rejected or dismissed due to lack of evidence). Polymetal's Human Rights Policy establishes a comprehensive grievance mechanism allowing all stakeholders report their concerns, including: a) hotlines with the CEO, COO and site managers to ask questions important to employees. The answers are published in the corporate newspaper and the intranet, as well as emailed to the employees concerned; b) helpline for employees, community members and partners to report a concern anonymously; c) feedback boxes at the sites and in communities to make a query; d) employee and community surveys and questionnaires; e) workers 'councils; f) meetings and annual conference calls with the top management, the Group CEO and the Board of Directors; g) performance review meetings with the local communities.

Lessons learned	These represent examples of efforts to track and improve the
	performance of grievance mechanisms. Companies can build
	trust in their community grievance mechanisms by disclosing
	information on how these mechanisms are being used, the issues
	raised, any actions taken, and any remedy provided.

Title	18. Public disclosure of community fatalities and injuries
Leading organisation	AngloGold Ashanti
Products	-
Stage of the mineral development	Development, operation
sequence	
Type of stakeholders involved	Employees
Type of quarry	All
Brief description	

Public disclosure of community fatalities and injuries AngloGold Ashanti publicly discloses data on community fatalities and injuries related to its mining operations. The company publishes five years of data on any deaths and injuries connected to security management and, separately, deaths and injuries of ASM workers not connected to security management. The company also discloses information on the relevant incidents, outlining the nature of any disputes that led to fatalities or injuries of community members or ASM workers.

Lessons learned	The public reporting of fatalities and serious injuries and
	incidents is becoming the norm. However, in most cases safety
	data is limited to aggregated, companywide statistics with little
	or no information on the locations of these harmful impacts.

Title	19. Take systematic action on gender: Gender-appropriate PPE
Leading organisation	ВНР
Country	Australia
Products	Iron ore
Stage of the mineral development	Operation
sequence	
Type of stakeholders involved	Employees
Type of quarry	All
Brief description	

BHP has been working with its main supplier to redesign Personal Protective Equipment (PPE) and workwear to ensure it is fit-for-purpose for all workers, including women. The supplier undertook a series of consultations across all of BHP's Australian operations to discuss improvements required to

the clothing range. A maternity wear workshop was held to hear from pregnant women workers about necessary modifications to the existing clothing range. In all, 72 changes and improvements have been made so far to accommodate the needs of women workers, for example to the size of socks and female boots and the size and weight of helmets, garments and headlamps.

Lessons learned	Gender-aware practices still lag far behind the global narrative on
	gender in mining. However, collectively, companies show that
	significant improvement is well within their reach. This is an
	example on how to develop a strategic approach that covers
	mining-related issues especially pertinent to women in the
	workplace and supporting equal opportunity in labour practices.

Title	20. Mine closure management standard
Leading organisation	Buenaventura
Country	Peru
Products	Gold, silver
Stage of the mineral development	Closure
sequence	
Type of stakeholders involved	Employees, local communities
Type of quarry	All
Brief description	

Social aspects of mine closure Buenaventura is one of a handful of companies to show evidence of a mine closure management standard that integrates social issues into the requirements. The 2020 standard (in the form of a detailed manual) requires operations to assess at the earliest possible stage, the socio-economic impacts of closure on affected communities and to undertake a participatory process to plan for the mitigation of these impacts. As well as detailing the mitigation measures to consider (such as job retraining or entrepreneurship skills development), the standard requires targets to be set for social closure objectives to assist later tracking.

Lessons learned	Given that the lifespan of a mine can be decades long and the
	impacts of the mining activity can persist long after closure, it is
	critical for companies to adopt a lifecycle approach from the
	earliest stage possible to ensure good post-closure outcomes for
	local communities, workers and environments.

REFERENCES

Good practices in community engagement and readiness. Second edition. Compendium of case studies from Canada's minerals and metals sector.

https://www.nrcan.gc.ca/sites/nrcan/files/mineralsmetals/files/pdf/rmd-rrm/GoodPractices2ed_En.pdf

SDG INDUSTRY MATRIX. Energy, Natural Resources & Chemicals. United Nations Global Compact and KPMG.

https://assets.kpmg/content/dam/kpmg/xx/pdf/2017/05/sdg-energy.pdf

RMI Report 2022. Responsible Mining Foundation.

https://www.responsibleminingfoundation.org/es/rmi-report-2022/