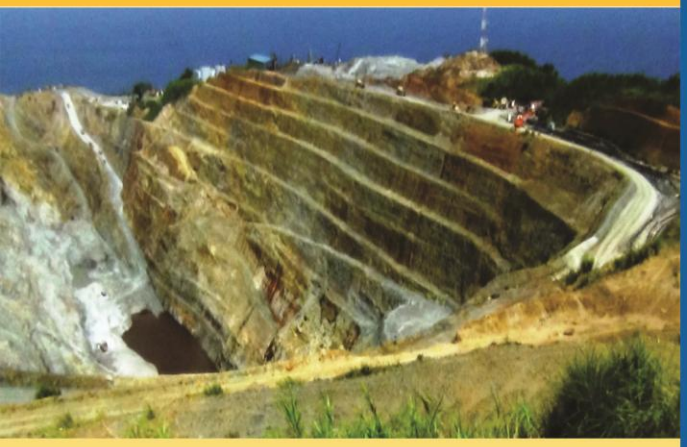
Asia-Pacific
Economic Cooperation

Corporate Social Responsibility in Mining for APEC Economies



INSTRUCTORS GUIDE BOOK

APEC

Mining Task Force
2013

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PREFACE

In 2011, the Asian Institute of Management developed teaching material on Corporate Social Responsibility (CSR) in the mining sector. The material, prepared by the Institute's Ramon V. del Rosario, Sr. Center for Corporate Social Responsibility (AIM-RVR Center), highlighted best CSR practices and relevant regulations and guidelines in the mining sector in Asia Pacific Economic Cooperation (APEC) economies.

This APEC-funded project is geared towards implementing sustainable development initiatives in the mining sector. In 2012, the AIM-RVR Center carried out Phase 2 of the project, aimed at promoting responsible and sustainable mining practices in APEC economies through a multi-stakeholder training program on CSR.

The main activities of Phase 2 are 1) the training program itself and 2) the development of a CSR Trainers Guidebook. This guidebook provides material and guidance for trainers handling the course.

The course presented in the guidebook has the following learning objectives:

To provide the participant with: An overview of the mining sector to put into context the positive and negative impact of mining; An understanding of CSR and Strategic CSR and its application in the mining industry; An awareness of the changing interests and concerns of stakeholders and how these can be better understood and addressed; and Insights on how to develop a sustainable CSR strategy.

This course is designed to be hands-on and interactive, and focuses on participative learning, including the use of teaching cases. The teaching cases are examples from different companies operating in APEC economies and are designed to allow the student to analyze both best practices and approaches to addressing serious mining concerns through CSR.

By promoting best practices, trainers can encourage mining stakeholders to effectively carry out their CSR programs and help achieve sustainability in mining. The teaching cases can also provide insights to other companies that are implementing CSR programs. Session briefs and teaching notes in this Guidebook offer trainers specific guidance on the conduct of the course and the use of the material. The key elements of the pilot training program have been compiled in this Guidebook, too, to help trainers handle their own training programs.

As the project overseer, I would like to congratulate and thank the following individuals for their significant contributions in making this research endeavor a great success.

Assoc. Prof. Maria Elena B. Herrera Faculty, Asian Institute of Management	Principal Editor and Author of the CSR Guidebook and Trainer for the CSR in Mining for APEC Economies Training Program
Maria Cristina I. Alarilla, Researcher, Asian Institute of Management	Secondary Author of the CSR Guidebook and Documenter for the CSR in Mining for APEC Economies Training Program
Prof. Nieves I. Confesor Faculty, Asian Institute of Management	Trainer for the CSR in Mining for APEC Economies Training Program

A/Prof. David I. Lawrence Executive Director, The Australian Center for Sustainable Mining Practices	Speaker and Resource Person for the CSR in Mining for APEC Economies Training Program
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Necylene Kate B. Gacilo Researcher, AIM-RVR Center	Project Coordinator
Geraldine A. Arca Administrative Coordinator, AIM-RVR Center	Administrative Support

I would also like to acknowledge the cooperation of Rapu-Rapu Minerals Inc., as represented by Cecille Caleja (VP for Public Relations and Corporate Affairs) for making their mining facilities available for a site visit for the participants of the Train-the-trainers Program.

Finally, I hope that this CSR Trainer Guidebook will offer practitioners useful directions in training for and improving CSR programs.

Thank you.

Prof. Francisco L. Roman
Project Overseer

ABOUT THE PROJECT

This APEC-funded project entitled, “Capacity Building of Mining Stakeholders in APEC Economies on Corporate Social Responsibility (Phase 2)” hopes to enhance the sustainability and information exchange within the mining sector in the APEC region through a multi-stakeholder training program that addresses relevant CSR issues and practices.

Mining is a significant global industry for both the producing and consuming economies. However, in many places, the economic potential of mining has been offset by problems such as environment degradation and resistance from communities. The project’s goal is to find ways to address these concerns, balance and assess the needs of multiple stakeholders, and help create a mining industry that contributes to the common good.

In many places, the mining industry is burdened with a history of mistrust. Those who oppose mining cite environmental destruction, damage to biodiversity, and its impact on local culture and communities. The concerns include both the impact of ongoing mining operations as well as the ensuing impact on both the environment and communities after mine sites are decommissioned. Therefore, the challenges are economic, environmental, and social. On top of these concerns, the reality of mining is that mineral deposits are finite. This means that all mining sites have a finite lifetime. For purposes of this project, sustainability is defined to be the pursuit of practices that not only seek to eliminate the negative impact of mining during and after the life of a mine but also to promote the positive effects of mining beyond the life of the mine.

Corporate Social Responsibility (CSR), which is built on the belief that business must address human needs, can help promote and enhance sustainability. Embedding the CSR concept and its practices in the mining industry could serve as a catalyst for the growth of sustainable mining practices.

There are several activities under the project: 1) the holding of a train-the-trainers program, 2) the development of the CSR Trainers Guidebook and 3) the sharing of experiences with the public through this Guidebook. The train-the-trainer’s program was conducted to pilot test the training design and the teaching cases developed in Phase I. All the participants were expected to present the status of the mining industry in their respective economies and contribute to the exchange of information. After the program, the participants had the opportunity to conduct the training in their respective economies and share their knowledge with others who might also conduct the program.

The evaluation and results of the pilot train-the-trainers program conducted in Legaspi City from 4-8 June 2012 served as source materials for the development of this CSR Trainers Guidebook, which should help other trainers conduct a course on CSR in mining in the different APEC economies.

ABOUT THE TRAINING PROGRAM

A key concern of stakeholders in the mining industry is the need for training and education in the different aspects of mining, which includes impact assessment and stakeholder empowerment. The main purpose of the training program is to promote responsible and sustainable mining practices among APEC economies.

The program will enhance the participant's ability to evaluate and manage CSR in all of the different stages of mining operations: pre-exploration, exploration, operations/extraction, and decommissioning and rehabilitation. Participants from different mining stakeholders (company, APEC member economy government and local community) would receive the following benefits:

- Training on realistic and effective evaluation of positive and negative impacts of mining operations, thus improving sustainable development strategies of mining communities and affected areas.

- Increased understanding of the practice of sustainable development in the mining sector by providing a multi-stakeholder, stage-by-stage approach to CSR in mining that highlights best practices.

- A venue for sharing experiences and fostering dialogue, which would allow participants to build alliances with other stakeholders.

The program can also be lengthened or shortened depending on the accessibility of a mine site visit, level of training and expertise of participants. However, based on the research project results and evaluation, the training program is best conducted for four days and may be extended to five or six days depending on the time needed for a mine visit. It is also necessary for the training program to end with a half-day workshop to serve as an integrative and evaluation session for the improvement of the program.

HOW TO USE THE GUIDEBOOK

This CSR Trainers Guidebook provides guidance for trainers who already have skills in conducting training programs and who already have a functional knowledge of both CSR and the mining industry. Ideally, participants should come from different stakeholder groups and locations. This will give each participant the opportunity to compare and share experiences with those who work under different circumstances.

The Guidebook is aimed at facilitating the teaching of CSR to those in the mining industry and provides a course design, tools and guidelines for conducting the program.

All participants will receive a soft copy of the main material, made up of Readings and Cases, in the Companion CD. The CD also includes teaching material primarily for the trainer's use. This includes slide decks that can be used during lectures and case discussions, especially during the integration stage.

The Guidebook itself is designed primarily for use by the instructor or trainer and includes the following main sections:

- Program Design
- Readings on Strategic CSR
- Session Briefs
- Teaching Cases
- Teaching Notes
- Administrative Guide

Two alternative course designs can be used, depending on whether the course can be run in a location that will allow students to visit an operating mine site. The first decision that needs to be made is whether the course can include such a site visit.

Each course design is divided into sessions. A brief for each session provides the trainer with guidelines for conducting that session. Many of the sessions have homework questions, which must be given to participants in advance. It is useful for all trainers to review the key messages that are covered by previous sessions. This will allow them to continuously integrate previous lessons into their sessions.

Most sessions are either lecture-discussions, case discussions or workshops. Sample slide decks for the key lecture-discussion sessions are provided in the companion CD.

For the teaching cases, teaching notes have been provided. The teaching notes should be used with the session brief to run the case discussion sessions. The trainer should be aware that guide questions for teaching cases are best given the day before to give students enough time to prepare for class.

The administrative guide provides guidance on the non-academic preparations for the course. It includes sample feedback forms that should be filled up by the participants at least once a day as these can be used to monitor and adjust the training as necessary.

The course will normally require that one of the trainers take the role of program director. The program director manages the academic objectives of the program and takes note of the pace of learning. It is the program director who speaks to trainers when changes need to be made midstream to review topics that are not yet clearly understood or to insert topics of particular interest to a class. The program director monitors participant learning through direct observation, informal interviews and the daily feedback forms.

In addition, the course should have a program administrator who is in charge of ensuring that all administrative matters are managed. This includes ensuring equipment is working, supplies are provided and that the room lay-out is appropriate.

The heart of the course is in the key messages in the session briefs and the key frameworks. In terms of methodology, the course uses participative learning, which has been shown to be the most effective for adult learning. This approach also draws out knowledge and shares it among practitioners, facilitates the localization of discussions, and encourages the translation of the learning to real life. Finally, the participative classroom provides an effective method of simulating the complex dynamics of multi-stakeholder discussions. The instructor is encouraged to include role playing as a method to highlight the complexities involved in stakeholder engagement.

Trainers are encouraged to localize some of the material – in particular, the samples used for some for the lecture-discussions could be changed to those familiar to the participants. Trainers can also substitute local cases for some of the teaching cases provided.

TARGET AUDIENCE AND MIX

Participant Selection. This training program is intended for mining stakeholders who are CSR practitioners or interested in implementing CSR. Participants should be selected on the basis of their experience, and their commitment to implementing and supporting CSR efforts. A questionnaire is prepared to assist the trainers in the selection process.

Number and Composition of Participants. The ideal number of participants for this program is 25-30 participants. This number should be a mixture of the different mining stakeholders - mining companies, community, government (national and local government), and other indirect or influencing mining stakeholders (e.g. media, NGOs).

TRAINING PROGRAM DESIGN

The program is designed to equip participants with a functional understanding of CSR in mining. The core of the program is designed around the different stages of mine life. The most important message of the course is that a CSR strategy that supports sustainability must encompass the entire lifetime of the mine and that a plan for each stage of mine life must already exist as part of the original business plan for the mine.

The program can be divided into three parts: Foundation, Stages, and Wrap Up and Integration.

LEARNING METHODOLOGY AND GENERAL APPROACH

The program is designed to be highly interactive. The suggested design includes discussions, workshops and case discussions. Case discussions can also involve role playing simulations.

Each key topic is composed of a theory session and an application session. The theory session is typically a lecture-discussion, which allows the trainer to provide frameworks but also allows students to participate in the evaluation and understanding of the framework for use in their own particular situations. The application sessions are workshops, case discussions designed around teaching cases, and discussions designed around a mine visit.

The teaching cases are designed to present participants with a realistic situation that can be used to apply the theory presented. It allows students to use the frameworks and approaches provided to analyze, develop a proposed approach, and defend this proposed approach.

The workshops allow participants to connect the approaches being presented to their own real life situations and also enable them to learn from each other. Ideally, the sessions can help build relationships that last beyond the course and help participants apply the learning from the course to addressing real life concerns.

DESIGN OF SESSIONS

The first day of the program is foundation building. It begins with lecture-discussions on the core topics of strategic CSR and the mining industry. The program then introduces the Stages approach to CSR in the mining industry. The first day is designed to end with a workshop, which allows the participants to share their particular situations and provides a foundation for future discussion. While there will be discussions before this workshop, this is the first highly interactive portion of the course and it sets the stage for future interaction.

The workshop also allows the program director to understand how the discussions in succeeding days might go. All trainers participating in the program are encouraged to observe this workshop.

The design ends with an integrative session that should accomplish at least two general objectives: 1) allow the participant to understand how the learning can be applied to real life, and 2) enable the participant to help improve the content and methodology of the program through feedback and comments.

Day 2 covers the pre-exploration and exploration phases and provides students with the opportunity to apply their ability to evaluate a national situation as well as a specific mine location.

Day 3 covers the Operations phase. There are two alternative designs for Day 3, depending on whether the course design allows for a mine site visit.

Day 4 is the last day and begins with the decommissioning and rehabilitation phase. This is also the stage at which performance monitoring and evaluation are more closely discussed. The day ends with an integrative case and an integrative workshop.

ALTERNATIVE DESIGNS

The material provided can also be used for other training designs. For example, it is possible to use the material to provide CSR training using a course designed around specific areas of concern (environment, indigenous communities, socio-economic development, etc.). It is also possible to design the program around specific skills necessary in developing and implementing CSR programs (e.g. assessment, development of CSR strategy, stakeholder engagement, conflict management, performance monitoring and evaluation).

CORPORATE SOCIAL RESPONSIBILITY IN THE APEC MINING SECTOR
Program Design (Per Day)

DAY 1 Mining Industry, Strategic Approach and Workshop	**DAY 2** Exploration	**DAY 3** (Option A and B) Operations and Rehabilitation		**DAY 4** Performance Monitoring and Evaluation
		OPTION A	**OPTION B**	
1A Convocation 8:30-9:00	2A *Lecture-Discussion:* Pre-exploration: *Assessment of Footprint and Stakeholders* 8:30-9:50	3i-A	3ii-A *Lecture-Discussion:* Operations 8:30-9:50	4A *Lecture-Discussion:* Performance Monitoring and Evaluation 8:30-9:50
1B *Lecture Discussion: Introduction to CSR and Strategic CSR* 9:00-10:30	*Can Group Discussion and Break* 9:50-11:10	Site Visit	*Break* 9:50-11:10	*Can Group Discussion and Break* 9:50-11:10
Break 10:30-11:00	2B		3ii-B	4B
1C *Lecture Discussion:* The Mining Industry, Sustainability Challenges and Best Practice 11:00-12:30	*Case Discussion:* Australia Economy Report 11:10-12:30		*Lecture-Discussion:* Decommissioning and Rehabilitation 11:10-12:30	*Case Discussion:* Antamina and the Mining Fund 11:10–12:30
L U N C H 12:30-1:30				
1D *Lecture-Discussion:* A Framework for Strategic CSR in the Mining Sector	*Can Group Discussion and*	*Can Group Discussion and Break*	*Can Group Discussion*	*Can Group Discussion and Break*

1:30-2:30	*Break*	2:10-3:30	*and Break*	1:30-3:20
1E *Workshop:* Mining Issues in APEC Economies: *What are the issues faced by the mining industry? What is needed to resolve these issues?* 2:30-5:30	1:30-3:30 2C *Case Discussion:* SMI and the Blaans: A Sustainable Development Alliance 3:30 – 5:30	3i-B *Case Discussion:* Rebuilding Trust: The Rapu Rapu Experience 3:30 – 5:30	1:30-3:30 3ii-C *Case Discussion:* Rebuilding Trust: The Rapu-Rapu Experience 3:30 – 5:30	3:20-4:30 4D Wrap-up and Integration 4:30-5:30

LIST OF AVAILABLE MATERIALS

In order to facilitate the conduct of a training program, below are the list of teaching materials and how to cite these materials:

BY TYPE

In this Guidebook:

Readings

R1. Herrera, M.B. and Alarilla, M.I. (2012). Sustainability in Mining: The Stages Approach. In APEC Secretariat, *Corporate Social Responsibility in Mining for APEC Economies: Trainers Guide Book*. APEC Secretariat.

R2. Alarilla, M.I. and Herrera, M.B. (2011). Corporate Social Responsibility in the APEC Mining Sector. In *CSR in Mining for APEC Economies*. APEC Secretariat. (Excerpted and reprinted in *Corporate Social Responsibility in Mining for APEC Economies: Trainers Guide Book* by Herrera, M.B. and Alarilla, M.I., 2012)

R3. Herrera, M.B., Alarilla, M.I. and Uy, R.L. (2011). *Towards Strategic CSR: Aligning CSR with the Business and Embedding CSR in the Organization: A Manual for Practitioners*. Makati City: Asian Institute of Management. (Excerpted and reprinted in *Corporate Social Responsibility in Mining for APEC Economies: Trainers Guide Book* by Herrera, M.B. and Alarilla, M.I., 2012)

Session Brief

SB 1. Alarilla, M.I. and Herrera, M.B. (2012). Convocation: Session Brief for Teachers. In APEC Secretariat, *Corporate Social Responsibility in Mining for APEC Economies: Trainers Guide Book*. APEC Secretariat.

SB 2. Alarilla, M.I. and Herrera, M.B. (2012). Introduction to CSR and Strategic CSR: Session Brief for Teachers . In APEC Secretariat, *Corporate Social Responsibility in Mining for APEC Economies: Trainers Guide Book*. APEC Secretariat.

SB 3. Alarilla, M.I. and Herrera, M.B. (2012). The Mining Industry, Sustainability, Challenges and Best Practice: Session Brief for Teachers. In APEC Secretariat, *Corporate Social Responsibility in Mining for APEC Economies: Trainers Guide Book*. APEC Secretariat.

SB 4. Alarilla, M.I. and Herrera, M.B. (2012). A Framework for Strategic CSR in the Mining Sector: Session Brief for Teachers. In APEC Secretariat, *Corporate Social Responsibility in Mining for APEC Economies: Trainers Guide Book*. APEC Secretariat.

SB 5. Alarilla, M.I. and Herrera, M.B. (2012). Mining Issues in APEC Economies: Session Brief for Teachers. In APEC Secretariat, *Corporate Social Responsibility in Mining for APEC Economies: Trainers Guide Book*. APEC Secretariat.

SB 6. Alarilla, M.I. and Herrera, M.B. (2012). Pre-exploration: Assessment of Footprint and Stakeholders: Session Brief for Teachers. In APEC Secretariat, *Corporate Social Responsibility in Mining for APEC Economies: Trainers Guide Book*. APEC Secretariat.

SB 7. Alarilla, M.I. and Herrera, M.B. (2012). Australia Economy Report: Session Brief for Teachers. In APEC Secretariat, *Corporate Social Responsibility in Mining for APEC Economies: Trainers Guide Book*. APEC Secretariat.

SB 8. Alarilla, M.I. and Herrera, M.B. (2012). SMI and the Blaans: A Sustainable Development Alliance: Session Brief for Teachers. In APEC Secretariat, *Corporate Social Responsibility in Mining for APEC Economies: Trainers Guide Book*. APEC Secretariat.

SB 9. Alarilla, M.I. and Herrera, M.B. (2012). Mine Visit: Session Brief for Teachers. In APEC Secretariat, *Corporate Social Responsibility in Mining for APEC Economies: Trainers Guide Book*. APEC Secretariat.

SB 10. Alarilla, M.I. and Herrera, M.B. (2012). Rebuilding the Trust: The Rapu-Rapu Experience: Session Brief for Teachers. In APEC Secretariat, *Corporate Social Responsibility in Mining for APEC Economies: Trainers Guide Book*. APEC Secretariat.

SB 11. Alarilla, M.I. and Herrera, M.B. (2012). PT Inco and the Karonsie Dongi Group: Session Brief for Teachers. In APEC Secretariat, *Corporate Social Responsibility in Mining for APEC Economies: Trainers Guide Book*. APEC Secretariat.

SB 12. Alarilla, M.I. and Herrera, M.B. (2012). Operations: Session Brief for Teachers. In APEC Secretariat, *Corporate Social Responsibility in Mining for APEC Economies: Trainers Guide Book*. APEC Secretariat.

SB 13. Alarilla, M.I. and Herrera, M.B. (2012). Decommissioning and Rehabilitation: Session Brief for Teachers. In APEC Secretariat, *Corporate Social Responsibility in Mining for APEC Economies: Trainers Guide Book*. APEC Secretariat.

SB 14. Alarilla, M.I. and Herrera, M.B. (2012). Performance Monitoring and Evaluation: Session Brief for Teachers. In APEC Secretariat, *Corporate Social Responsibility in Mining for APEC Economies: Trainers Guide Book*. APEC Secretariat.

SB 15. Alarilla, M.I. and Herrera, M.B. (2012). Antamina and the Mining Fund: Session Brief for Teachers. In APEC Secretariat, *Corporate Social Responsibility in Mining for APEC Economies: Trainers Guide Book*. APEC Secretariat.

SB 16. Alarilla, M.I. and Herrera, M.B. (2012). Philex Mining Corporation: Multi-site Monitoring of CSR: Session Brief for Teachers In APEC Secretariat, *Corporate Social Responsibility in Mining for APEC Economies: Trainers Guide Book*. APEC Secretariat.

SB 17. Alarilla, M.I. and Herrera, M.B. (2012). Integration: Session Brief for Teachers. In APEC Secretariat, *Corporate Social Responsibility in Mining for APEC Economies: Trainers Guide Book*. APEC Secretariat.

SB18. Alarilla, M.I. and Herrera, M.B. (2012). List of Figures and Frameworks. In APEC Secretariat, *Corporate Social Responsibility in Mining for APEC Economies: Trainers Guide Book*. APEC Secretariat.

Teaching Case

TC 1. Uy, R. L. and Herrera, M.B. (2012). Australia Economy Report. In APEC Secretariat, *Corporate Social Responsibility in Mining for APEC Economies: Trainers Guide Book*. APEC Secretariat.

TC 2. Alarilla, M.I. and Herrera, M.B. (2012). SMI and the Blaans: A Sustainable Development Alliance. In APEC Secretariat, *Corporate Social Responsibility in Mining for APEC Economies: Trainers Guide Book*. APEC Secretariat.

TC 3. Decena, J.S.and Herrera, M.B. (2012). Rebuilding the Trust: The Rapu-Rapu Experience. In APEC Secretariat, *Corporate Social Responsibility in Mining for APEC Economies: Trainers Guide Book*. APEC Secretariat.

TC 4. Decena, J.S. and Herrera, M.B. (2012). Antamina and the Mining Fund. In APEC Secretariat, *Corporate Social Responsibility in Mining for APEC Economies: Trainers Guide Book*. APEC Secretariat.

TC 5. De Jesus, M.C. and Herrera, M.B. (2012). Philex Mining Corporation: Multi-site Implementation of CSR. In APEC Secretariat, *Corporate Social Responsibility in Mining for APEC Economies: Trainers Guide Book*. APEC Secretariat.

Teaching Notes

TN 1. Herrera, T. and Herrera, M.B. (2012). Australia Economy Report: Teaching Notes. In APEC Secretariat, *Corporate Social Responsibility in Mining for APEC Economies: Trainers Guide Book*. APEC Secretariat.

TN 2. Carlos, P. and Herrera, M.B. (2012). SMI and the Blaans: A Sustainable Development Alliance: Teaching Notes. In APEC Secretariat, *Corporate Social Responsibility in Mining for APEC Economies: Trainers Guide Book*. APEC Secretariat.

TN 3. Herrera, T..and Herrera, M.B. (2012). Rebuilding the Trust: The Rapu-Rapu Experience: Teaching Notes. In APEC Secretariat, *Corporate Social Responsibility in Mining for APEC Economies: Trainers Guide Book*. APEC Secretariat.

TN 4. Carlos, P. and Herrera, M.B. (2012). Antamina and the Mining Fund: Teaching Notes. In APEC Secretariat, *Corporate Social Responsibility in Mining for APEC Economies: Trainers Guide Book*. APEC Secretariat.

TN 5. Herrera, T. and Herrera, M.B. (2012). Philex Mining Corporation: Multi-site Implementation of CSR: Teaching Notes. In APEC Secretariat, *Corporate Social Responsibility in Mining for APEC Economies: Trainers Guide Book*. APEC Secretariat.

In the Companion CD:

Slide Deck

SD 1. Roman, F.L. (2012). An Introduction to CSR and Strategic CSR. Presented during the CSR in Mining for APEC Economies: Train the Trainers Program.

SD 2. Herrera, M.E. (2012). Framework for Strategic CSR in the Mining Sector. Presented during the CSR in Mining for APEC Economies: Train the Trainers Program.

SD 3. Laurence D. (2012). Presented during the CSR in Mining for APEC Economies: Train the Trainers Program.

SD 4. Laurence D. (2012)Presented during the CSR in Mining for APEC Economies: Train the Trainers Program.

Readings

RCD 1. de Jesus M.C. and Herrera, M.B. (2011). Corporate Social Responsibility in the APEC Mining Sector. In *CSR in Mining for APEC Economies*. APEC Secretariat.

RCD 2. de Jesus M.C. and Herrera, M.B. (2011). Multi-Stakeholder Initiatives and CSR Relevant Legislation. In *CSR in Mining for APEC Economies*. APEC Secretariat.

RCD 3. de Jesus M.C. and Herrera, M.B. (2011). Summary of Major Stakeholders and Concerns. In *CSR in Mining for APEC Economies*. APEC Secretariat.

Previously Published Materials:

1. Alfonso, Felipe B. and James P. Neelankavil. (2009), *CSR and Collaborative Partnerships*. AIM Journal of Asian Management Volume 1, Issue 1. Makati City: AIM.
2. Herrera, M.B., Alarilla, M.I. and Uy, R.L. (2011). *Towards Strategic CSR: Aligning CSR with the Business and Embedding CSR in the Organization: A Manual for Practitioners*. Makati City: Asian Institute of Management.
3. Herrera, M.B. (2011). Corporate Social Responsibility in the APEC Mining Sector (Educational Framework). In APEC Secretariat, *CSR in the APEC Mining Sector*. APEC Secretariat.
4. Herrera, M.B. (2011). Training Program Design. In APEC Secretariat, *CSR in the APEC Mining Sector: Training Program Design and Management Teaching Cases*. APEC Secretariat.
5. Herrera, M.B. (2009). Some Approaches to Developing Useful CSR Metrics. *Asian Institute of Management Journal of Asian Management, Volume 1* (1), pp. 21-42.
6. Herrera, M.B. (2007). CSR and Value Creation. In V. Santos (Ed.), *Doing Good in Business Matters: CSR in the Philippines: Volume 1 Frameworks* (pp. 114-195). Makati City: Asian Institute of Management and De La Salle Professional Schools.
7. Herrera, M.B. and Decena, M.S. (2007). Measuring CSR Performance. In V. Santos (Ed.), *Doing Good in Business Matters: CSR in the Philippines: Volume 1 Frameworks* (pp. 196-231). Makati City: Asian Institute of Management and De La Salle Professional Schools.

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Operations and Rehabilitation</th><th>DAY 4
Performance Monitoring and Evaluation</th></tr>
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DAY 1 Mining Industry, Strategic Approach and Workshop	**DAY 2** Exploration		**DAY 3** (Option A and B) Operations and Rehabilitation		**DAY 4** Performance Monitoring and Evaluation
			OPTION A	**OPTION B**	
1D **In this Guidebook:** SB4 **In the Companion CD:** SD3 **1E** **In this Guidebook:** SB 5 **In the Companion CD:** RCD 1	**2C** **In this Guidebook:** SB 8 TC2 TN 2 RDG 1 **In the Companion CD:** RCD 1	**3i-B** **In this Guidebook:** SB 10 TC 4 TN 4 **Or** SB 11 TC 3 TN 3	**3ii- C** **In this Guidebook:** SB 13 RDG 1		**4C** **In this Guidebook:** SB 16 TC 6 TN 6
			3ii-D **In this Guidebook:** SB 10 TC 4 TN 4		**4D** **In this Guidebook:** SB 17

MATRIX OF STAKEHOLDERS AND CONCERNS (PER CASE)

The training program was designed using the Stages Approach that was discussed in the previous section. However, the materials can be used to design training programs depending on the needs of the organization or targeted audience. (See Training Program Design for Suggested Approaches)

The Matrix of Stakeholder and Concerns maps out the topics covered in each case. This matrix serves as a guide for trainers who prefer to design their own program. Each (X) mark indicates that the stakeholder or concern indicated is included in the case. The following topics are covered by the matrix:

- **Part 1- Type of Mine and Stage of Operations**

  Part one discusses the type of mining that is done by the company (i.e. open pit or sub-surface mining). The type of mining activity affects its footprint. An open pit mine, for example would have a larger physical impact because of the hole left even after mining operations have ceased.

  Depending on the stage of mining, footprint and stakeholders may change. The stage of operations indicates what stage the mine is in among the following:

  - Pre-exploration- The initial planning phase, which includes the submission of the requirements for government and environmental permits.

  - Exploration and Feasibility- During the exploration stage, the company conducts tests to ensure that minerals available in a site are commercially viable for production. During this stage, the company also completes the necessary baseline and environmental reports. This also includes the development of the infrastructure.

  - Operations (including construction and extraction) - The stage when minerals are extracted by the company. The end of this stage sometimes involves additional permits.

  - Decommissioning and Rehabilitation- During this stage, the company ceases operations and rehabilitates the mine site to ensure that it would still be usable afterwards. It also involves ensuring the sustainability of the local communities after the mine closes.

- **Part 2- Stakeholders**

Part two maps out the different stakeholders that are involved in mining operations. Each case takes into consideration the views of multiple stakeholders, who may include (but are not limited to) the following:[1]

- Primary internal stakeholders are those who are part of the company. These include shareholders and employees.

- Primary external stakeholders are individuals or organizations that are part of the company's supply chain, such as suppliers or consumers.

[1] Excerpt from the following: RVR Center (2011). *Towards Strategic CSR: Aligning CSR with the Business and Embedding CSR into the Organization (A Manual for Practitioners).*

- Secondary stakeholders are those that are not directly linked to the corporate supply chain but are nevertheless affected by or have an interest in the company's operations. This might include the host community or the surrounding environment.

- Moderating or mediating stakeholders (such as the Church, non-government organizations, the media or the government) serve as a proxy for general society, the environment or indirect and direct stakeholders.

- International stakeholders include foreign markets of investors or consumers that serve as touchstones for acceptable business behavior.

- **Part 3- Concerns**

  Part three of the matrix gives an overview of the different issues or concerns that the case revolves around. The issues revolve around the following themes:

  - Economic- This includes the economic returns from mining operations as well as taxes paid to the host communities. It also includes issues regarding the distribution of mining revenues and management of funds for mining rehabilitation.

  - Environment- This gives students an overview of the environmental costs of mining. Rehabilitation issues are also included under this column.

  - Social- This would cover the social responsibility programs of the company (i.e. livelihood programs), legacy issues and the cost of mining operations to the community.

  - Cultural- Cases that have an (X) mark under this column tackle issues such as ancestral domain and indigenous people's rights.

  - Physical/Safety- This column takes into consideration issues that can affect the safety of mining employees as well as the physical structure of the mine site. This takes into account threats from rebel groups in the area of operations.

  - Political- If there is an (X) mark under this column, it means the case takes into consideration the development stream and government regulation.

- **Part 4- Others**

  Part four gives additional information as to what the case discusses.

PART 1: TYPE OF MINE AND STAGE OF OPERATIONS

NAME OF COMPANY	TITLE OF THE CASE	COUNTRY/Mineral	Type of Mining	STAGE OF OPERATION			
				Pre-Exploration	Exploration	Operations	Rehabilitation
Philex Mining Corporation	Philex Mining Corporation: Multi-Site Implementation of CSR	Philippines Gold	Open Pit and Underground/Block Cave		X	X	X
Sagittarius Mines, Inc. (SMI)	SMI and the Blaans: A Sustainable Development Alliance	Philippines Copper	Proposed is Open Pit	X	X		
Rapu-Rapu Polymetallic Project	Rebuilding Trust: The Rapu-Rapu Experience	Philippines Copper and Zinc	Open Pit			X	(Proposed)X—Rapu-Rapu expects to cease operations in six years
Compania Minera Antamina	Antamina and the Mining Fund	Peru Silver, Copper and Zinc	Open Pit			X	X

PART 2: STAKEHOLDERS

NAME OF COMPANY	STAKEHOLDERS				
	Mining Company	Employees	National Government	Regulating Bodies	Local Government
Philex Mining Corporation	X	X	X	X	X
Sagittarius Mines, Inc	X	X	X	X	X
Rapu-Rapu Polymetallic Project	X		X	X	X
Compania Minera Antamina	X		X	X	X
Australia	X	X	X	X	X (State)

NAME OF COMPANY	Stakeholders									
	Community	Indigenous People	Environment	Financiers	Buyers	NGOs	Media	Industry Associations	Other Organizations	Multilateral Organizations
Philex Mining Corporation	X		X			X				
Sagittarius Mines, Inc.	X	X	X			X			X (Other mining companies and the Church)	
Rapu-Rapu Polymetallic Project	X		X			X			X (Church)	
Compania Minera Antamina	X		X	X		X				X
Australia	X	X (Regulation)	X					X		

PART 3: CONCERNS

Name of Company	Concerns				
	Economic			Environment	
	Economic Returns	Taxes and Development	Others	Cost/ Benefit to the Environment	Others
Philex Mining Corporation	X	X	Contributions to the long-term development of the host community "Boom-bust" cycle	X	In some cases it is the community that hurts the environment and the mining company is the one that helps to rehabilitate the area.
Sagittarius Mines, Inc.	X	X (Improvement of the municipality)	Projected to be the largest mining in the Philippines Provision of livelihood	X	
Rapu-Rapu Polymetallic Project	X	X	Provision of livelihood	X	
Compania Minera Antamina	X	X	Creation of a mining fund	X	Adheres to international standards on the environment in response to the requirements of the government and its funders (i.e. International Finance Corporation)
Australia	X	X		X	Mine rehabilitation Waste management Acid mine drainage

NAME OF COMPANY	Concerns							
	Social			Cultural		Physical/Safety	Political	
	Legacy Issues	Cost/Benefits to the Community	Others	Ancestral Domain	Others		Development Stream	Others
Philex Mining Corporation	X	X				Security Issues- Rebel groups	X	
Sagittarius Mines, Inc.	X	X	Worker rotation scheme	X		Security Issues- Rebel groups, indigenous people (warrior culture)	X	
Rapu-Rapu Polymetallic Project	X	X						Rebuilding the company's working relationship with the local government
Compania Minera Antamina	X	X					X	
Australia	X	X		X			X	Government role in promoting responsible mining practices

PART 4: CONCERNS

NAME OF COMPANY	OTHER INFORMATION	REGULATION AND REVENUE DISTRIBUTION MANAGEMENT	PERFORMANCE MONITORING AND EVALUATION
Philex Mining Corporation	CSR Framework implementation across different sites and maintenance of the company's social license to operate Importance of leadership in ensuring the company's commitment to CSR	The local government unit has concerns regarding the distribution of government revenue—A large portion goes to the national government even though it is the local community that is most affected by company operations.	Result or output of CSR programs (i.e. awards received, number of trees planted and number of scholars)
Sagittarius Mines, Inc.	SMI is projected to have one of the largest Copper mines in the world and the largest mining operation in the Philippines once it operates	Regulation by LGU banning open pit mining SMI has invested a considerable amount during the exploration stage. Although the company is ready to proceed to the operations stage, the local government needs to give its agreement before it can operate.	
Rapu-Rapu Polymetallic Project	Regaining the company's social license to operate -- Moving from conflict to cooperation	Mandated social development programs and "voluntary" CSR programs	Output of the company's CSR programs
Compania Minera Antamina	Ancash Association- organization devoted to funding NGO programs	Considerable impact of the project on government revenue Creation of programs to ensure that the community benefits from mining activities.	Result of CSR programs (i.e. number of organizations funded, scholarships given etc.)
Australia	One of the issues faced by the Australian mining industry is the shortage of labor supply The Australian mining industry is one of the leaders in promoting responsible mining in different parts of the world	The mining industry has a considerable impact on the economy's GDP The government wants to increase taxes to ensure benefits from mining operation	

Teaching Materials

Session Brief – For Teachers

CONVOCATION

CSR IN APEC MINING: TRAIN THE TRAINERS PROGRAM

Session Code: 1A
Session Title: Convocation
Session Topic: Opening Remarks and Introduction
Session Format: Lecture

ABSTRACT

The objective of the session is to officially welcome the participants to the training program. The session will begin with the opening remarks followed by an introduction to the training program.

The convocation will level expectations between the trainers and participants. The introduction will include the program objectives, schedule, topics, as well as a profile of trainers and participants.

SESSION OBJECTIVES

A. To provide an understanding of the relevance of the training program to the participants and to the mining industry;
B. To show how the participants can apply the concepts and frameworks into practice; and
C. To introduce the trainers and participants.

CONTENT SUMMARY

The Convocation will start with brief opening remarks and introduction. The introduction to the training program will include: Program Objectives, Materials Used in the Training Program, Methodologies Used, Program Schedule and Topics, Profile of Trainers and Participants, Organizations Represented, Administrative Matters, and Field Trip Reminders *(if applicable).*

The program objective is to enhance the participant's ability to evaluate and manage CSR in the different stages of the stages of mining. The participants will benefit from the training through:

- Training and education on realistic and effective evaluation of positive and negative effects of mining operations;
- Increased understanding on the practice of sustainable development in the mining sector; and
- A venue for sharing experiences and fostering dialogue and building alliances with communities and governments.

This session brief was written by Maria Cristina I. Alarilla under the supervision of Assoc. Prof. Maria Elena B. Herrera for the project entitled, "CSR in APEC Mining: Train the Trainers Program" This APEC funded project was implemented by the RVR Center for Corporate Social Responsibility.

The key concepts that will be discussed in the training will include: Strategic CSR, CSR in the Mining Sector, Mine Life Cycle, Footprint and Value Chain Analysis, Stakeholder Mapping and Analysis, Performance Evaluation and Monitoring. Frameworks that will be discussed are: Developing a CSR Strategy; Integrating Social Performance; Responsible Business; Influences on CSR; and Systems Frame.

Learning methodologies include lectures, case discussions, role-playing and workshops. The case is a platform for the participants to understand the frameworks and processes.

The training program is scheduled for four days. Topics that will be covered include: Strategic CSR; The Mining Industry and Sustainability, Challenges and Best Practice; Framework for Strategic CSR in the Mining Sector; Mining Issues in APEC Economies; Pre-exploration: Assessment of Footprint and Stakeholders; Operations; Closure and Rehabilitation; Performance Monitoring and Evaluation.

SESSION SEQUENCE PLAN

The session is scheduled for 30 minutes. The session will have three discussion blocks: 1) Opening Remarks; 2) Introduction; and 3) Q and A.

1) *Opening Remarks:* The objective is to formally welcome the participants to the training program. A brief discussion will be given on the importance of the training program and how it could contribute to the existing CSR knowledge in the economy's mining industry.

2) *Introduction:* The objective is to give a brief presentation of the training program. The contents of the presentation may include: Program Objectives, Materials Used in the Training Program, Methodologies Used, Program Schedule and Topics, Profile of Trainers and Participants, Organizations Represented, Administrative Matters, And Field Trip Reminders *(if applicable).*

3) *Q and A:* The objective is to clarify some concerns of the participants.

KEY MESSAGES

- The training program is a sharing of best practices and concerns. It seeks to provide knowledge on the CSR initiatives and approaches developed by mining companies in different economies.

- The training program will equip participants with the knowledge, understanding and practical skills in implementing CSR in the mining industry.

- The training program adopts the mine life cycle in discussing the issues and concerns faced by mining companies.

Session Brief – For Teachers

INTRODUCTION TO CSR AND STRATEGIC CSR

CSR IN APEC MINING: TRAIN THE TRAINERS PROGRAM

Session Code: 1B
Session Title: Introduction to CSR and Strategic CSR
Session Topic: Definition of CSR and Strategic CSR
Session Format: Lecture-Discussion

ABSTRACT

The primary objective of the session is to provide the definition and frameworks for a strategic approach to Corporate Social Responsibility (CSR).

The strategic approach to CSR involves more than philanthropy. It involves integrating and embedding CSR in company operations. A strategic approach to CSR takes into account the significant influence stakeholders can have on organizations and the positive economic effects of a responsible approach to business.

A strategic approach to CSR results in value for both the shareholder as well as all other stakeholders of the organization. It involves evaluating the non-market environment in addition to the market environment (customers, competitors). Evaluating the non-market environment involves understanding both its footprint as well as its stakeholders. This understanding allows the company to ensure that its strategy and operations are aligned with both its market and non-market environment – the heart of a strategic approach to CSR.

The four stages of the Strategic CSR approach are: Assessment, Formulation, Implementation and Evaluation.

LEARNING OBJECTIVES

- To provide an understanding of the definition of CSR and Strategic CSR
- To provide an understanding of the benefits of implementing CSR
- To provide an understanding of a strategic approach to CSR

STUDY QUESTIONS AND/OR HOMEWORK ASSIGNMENT

- How do you define CSR?
- How would you define Strategic CSR?
- What are the objectives of engaging in CSR? How would you define a successful CSR program?
- What are the key success factors in implementing an effective CSR program?

This session brief was written by Maria Cristina I. Alarilla under the supervision of Assoc. Prof. Maria Elena B. Herrera for the project entitled, "CSR in APEC Mining: Train the Trainers Program" This APEC funded project was implemented by the RVR Center for Corporate Social Responsibility.

CONTENT SUMMARY

The session will cover the following topics: a) definition of CSR, b) rationale for engaging in CSR and levels of CSR response, c) a strategic approach to CSR, and d) benefits of engaging in CSR.

CSR involves the interface between the company and its environment. The development of a CSR strategy begins with looking beyond the market environment. An evaluation of the non-market environment involves reviewing the company's footprint and stakeholders. The company's footprint is the environmental and social impact of company operations. This begins with a review of the corporate value chain. For many companies, the footprint review is expanded to include the extended value chain – which is defined to include the company's suppliers, partners and distributors. (See Figure 1: Integrating Social Performance)

The levels of CSR Response include resource transfer, community relations, business/industry practices, business strategy or integrating responsible business framework. (See Figure 2: Levels of CSR Response Framework)

The strategic approach to CSR starts with an external assessment of market and non-market environment. An internal assessment is then conducted to develop an approach that is aligned both with external realities as well as the company's assets and capabilities. The challenge for companies is to develop a CSR strategy and program that both efficiently harnesses company resources and effectively addresses relevant social and environmental concerns. The objective is to develop CSR programs that are sustainable and effective. (See Figure 3: Developing a CSR Strategy and Figure 4: Implementing Strategic CSR: A Process Frame)

An effective CSR Strategy needs to take into consideration context and coherence. Context refers to the external and internal environment of the company. Coherence refers to internal consistency of the programs. (See Figure 5: Integrating and Aligning CSR)

A well-implemented CSR strategy requires formal procedures and structures as well a corporate culture that is committed to and positive about CSR. (See Figure 6: Responsible Business)

A well-crafted and implemented CSR strategy creates both social and economic value.

SESSION SEQUENCE PLAN

The session is scheduled for 80 minutes. The session will have four blocks: 1) Definition of CSR; 2) Levels of CSR Response; 3) Phases of Strategic CSR; and 4) Benefits of Implementing CSR.

1) *Definition of CSR and Strategic CSR*: The objective is for the participants to have a clear (and shared) understanding of CSR and Strategic CSR.

2) *Levels of CSR Response*: The objective is for the participants to identify the various approaches in CSR—from philanthropy to integrating responsible business framework. Examples of each should also be given.

3) *Phases of Strategic CSR*: The objective is for the participants to become familiar with the different phases of strategic CSR—assessment, formulation, implementation, and evaluation. Key activities for each phase will be explained (i.e. for Assessment: stakeholder analysis and footprint assessment)

4) *Benefits of implementing CSR*: The objective of this session block is for the participants to become familiar with the benefits of CSR. It should also provide examples of CSR programs, which created shared value.

KEY MESSAGES

- Purely philanthropic activities can become marginalized. A CSR approach that is integrated into business strategy and operations is both sustainable as well as more likely to produce real value both for all stakeholders.
- A strategic approach to CSR would be one that is implemented in a manner which results in embedding CSR into the company's operations, procedures and culture. It is a company-wide effort.
- In a developing economy, communities will often depend on philanthropic activities. However, alignment between corporate efforts, corporate capabilities and priority stakeholder needs is important. Programs that effect real, long-term change are the target.
- CSR strategy and programs need to be sustainable, replicable and strategic.

REQUIRED MATERIAL

Herrera, Maria Elena B. (2011). "Annex 1.1: A Stages Approach to CSR." CSR in Mining for APEC Economies. Asia Pacific Economic Cooperation Secretariat.

REFERENCES

Alfonso, Felipe B. and Neelankavil, James P. (2009), "CSR and Collaborative Partnerships." AIM Journal of Asian Management Volume 1, Issue 1. Makati City: Asian Institute of Management.

Alfonso, Felipe B. and de Jesus, Marie Kirstin C. (2007), "Implementing Corporate Social Responsibility Initiatives." In Doing Good in Business Matters: CSR in the Philippines (Frameworks). Makati City: Asian Institute of Management.

Alfonso, Felipe B. and Amacanin, Milagros C. (2007), "Strategic Implications of CSR: Framing the Corporate Strategy." In Doing Good in Business Matters: CSR in the Philippines (Frameworks). Makati City: AIM.

Alfonso, Felipe B., Francisco L. Roman and Rose F. Quiambao. (2005) "Social Responsibility and Governance in the Philippines." Occasional Paper. Makati City: Asian Institute of Management

SPECIAL REQUIREMENTS

a. Equipment and supplies required:
   For the Room Set-up: LCD Projector and Screen; Laptop; Mic/lapel; Whiteboard and markers; USB for transferring the presentations; Recorder
b. Room lay-out: Classroom style

c. Staff support required: Transfer of the PowerPoint Presentation (.ppt) to the laptop and documentation of the event

FIGURES AND FRAMEWORKS

Refer to List of Figures and Frameworks Used in Session Briefs

- Figure 1: Integrating Social Performance
- Figure 2: Levels of CSR Response Framework
- Figure 3: Developing a CSR Strategy
- Figure 4: Implementing Strategic CSR: A Process Frame
- Figure 5: Integrating and Aligning CSR
- Figure 6: Responsible Business

Session Brief – For Teachers

THE MINING INDUSTRY, SUSTAINABILITY CHALLENGES AND BEST PRACTICE

CSR IN APEC MINING: TRAIN THE TRAINERS PROGRAM

Session Code: 1C
Session Title: The Mining Industry, Sustainability Challenges and Best Practice
Session Topic: State of the Mining Industry and Mining Trends
Session Format: Lecture-Discussion

ABSTRACT

The objective of the session is to present the state of the APEC mining industry as well as mining trends. The lecture-discussion will be focused on the current situation, concerns, challenges and sustainability issues of the APEC mining industry. A sustainable mining framework will also be explained.

The mining industry plays an important role in the global economy because of its monetary value and employment contribution. However, critics argue that mining creates displacement and destroys the environment. The bad performance of mining companies has resulted to legacy issues, which fueled anti-mining sentiments among host communities.

The APEC region is a major producer and consumer of metals and minerals. The mining industry contributes significantly to the economies of Canada, Australia, Peru and Indonesia, bringing in foreign investment, taxes and royalties, and employment. This is particularly important for developing economies such as Peru, Indonesia and Chile. Governments of APEC member economies recognize the contribution of the mining industry to their gross domestic product (GDP). However, issues still remain on how to mitigate the environmental and social impact of mining on the host communities.

A sustainable mining framework takes a holistic approach that is implemented in all mining operations—safety, environment, economics, community and resource efficiency.

LEARNING OBJECTIVES

- To provide an understanding of the contribution of APEC economies to the global mining industry
- To provide an understanding of the Sustainable Mining Framework
- To provide examples of sustainable mining practices across the Asia-Pacific region.

This session brief was written by Maria Cristina I. Alarilla under the supervision of Assoc. Prof. Maria Elena B. Herrera for the project entitled, "CSR in APEC Mining: Train the Trainers Program" This APEC funded project was implemented by the RVR Center for Corporate Social Responsibility.

STUDY QUESTIONS AND/OR HOMEWORK ASSIGNMENT

- What are the current challenges faced by the mining industry in APEC economies?
- What are the sustainable initiatives adapted by the industry?
- What is the role of mining stakeholders/players—government, industry associations, mining companies?

CONTENT SUMMARY

The session begins with a brief overview of the state of the global mining sector. The session then covers the state of the mining industry in APEC economies. The Sustainable Mining Framework is then presented. The discussion ends with examples of sustainable mining practices and legacy issues in APEC economies.

The subtopics that must be covered are:

- Role of the APEC economies in the global mining industry in terms of supply and demand
- State of mining industry in APEC economies
- Mining stakeholders
- Challenges of the mining industry in APEC economies
- Sustainable mining framework and
- Sustainability initiatives of APEC Economies

Below is a sample. Please be reminded that the information presented in the session must be recent.

All six continents contribute to the global mining industry. North America is the leading producer of gold and silver. Europe is the home of major mining companies, such as Anglo American, BHP Billiton and Rio Tinto. Asia is the leading producer of base metals, ferrous metals and coal. China, India, Russia, Indonesia are major contributors to Asia mining. South America is the leading producer of base and ferrous metals (i.e. copper and iron ore). Africa is the leading producer of cobalt, gold and diamonds. Australia is a major source of iron ore, base metals and gold.[1] Factors affecting the mining industry are: employment, machinery, safety and business.[2]

The APEC region is "the primary catalyst and beneficiary" of global mining trade.[3] It participates as a major producer and consumer of metals and minerals. In terms of supply, APEC economies produce a significant percentage of gold, copper, nickel, zinc and copper. In terms of demand, the APEC economies consume 70% of the global production of coal, iron ore and tin. The mining industry is a major contributor to the economies of Australia, Canada, Indonesia and Peru.
Mining investments in APEC economies account for 49% of foreign direct investments. Mineral exploration also increased from US$ 210 million in 2004 to US$ 156 million in 2005. The number of mineral exploration companies operating in China has grown significantly—from only seven companies in 2002 to 83 in 2005.

[1]Economy Watch. (30 June 2010). "World Mining Industries." http://www.economywatch.com/world-industries/mining/world.html (06 August 2012)
[2] Economy Watch. (30 June 2010). "Mining Industry." http://www.economywatch.com/world-industries/mining/ (06 August 2012)
[3]Noor, Muhamad. (27 June 2012). "APEC Ministers Responsible for Mining Meeting." Speech of Ambassador Muhamad Noor, Executive Director, APEC Secretariat. http://www.apec.org/Press/Speeches/2012/0627_MRM.aspx (06 August 2012)

The mining industry also played an important role in the development of the Australian and Canadian economies.

Mining stakeholders—government, industry associations and mining companies—actively promote environmental protection and community development by adopting sustainable mining practices. However, most legislation does not specifically adopt the mine life cycle. Others laws and regulations fall short in addressing human rights and indigenous communities. (See Reading in CD "Multi Stakeholder Initiatives and CSR-relevant Legislation")

The APEC mining industry faces a number of challenges: compliance with voluntary codes on sustainable mining practices; absence of accounting standards in measuring the impact of community programs; and weak governance structure.

In June 2012, the APEC Mining Task Force recognized the importance of sustainable development in mining, which can be achieved through "regional integration, fostering investment, increasing social responsibility, innovation and environmental advances in mining and metallurgy."[1]

The Sustainable Development Framework developed by Australian Centre for Sustainable Mining Practices takes a holistic approach. (See Figure 7: Sustainable Mining Practices Framework)

Below are the aspects and components considered by the Sustainable Development Framework:

- Safety: Risk Management; Employee Awareness and Responsibility; Informing and Reporting; Attitudes and Behavior; People, Process and Equipment; and Education and Training
- Environment: Leading Practices; Environmental Monitoring System; Reporting; Auditing and Verification; Technology; and Rehabilitation
- Community: Consultation and Engagement; SIA; Informing and Reporting; Planning for Closure; Business Development; and Education and Training
- Economic: Net Present Value; Optimization; IRR; Commodity Price; Feasibility; and Costs
- Efficiency: Planning and Design; Optimization; Geotechnical; Geological Model; Mine Management; and Recoveries (Mining and Milling)

Examples of Sustainable Mining Practices in Asia Pacific region include:

- The Leading Practice Program of the Australian Government produced 15 handbooks that contain information and case studies to encourage sustainable mining operations. The handbooks produced include: A Guide to Leading Practice Sustainable Development in Mining; Airborne Contaminants, Noise and Vibration; Biodiversity Management; ; Community Engagement and Development; Evaluating Performance: Monitoring and Auditing; Hazardous Materials Management ; Managing Acid and Metalliferous Drainage; Mine Closure and Completion; Mine Rehabilitation; Risk Management; Stewardship; Tailings Management; Water Management; Working with Indigenous Communities

[1]APEC. (28 June 2012) "Joint Statement: 2012 APEC Meeting of Ministers Responsible for Mining." http://www.apec.org/Meeting-Papers/Ministerial-Statements/Mining/2012_mining.aspx (06 August 2012)

- Rehabilitation planning is essential to ensure environmental sustainability and continued livelihood of the surrounding communities. In Malaysia, the old tin mine was developed into a golf course—the Mines Resort. In Indonesia, the coal mine was converted into a tourist and sport facilities operated by the city government of Sawahlunto.

SESSION SEQUENCE PLAN

The session is scheduled for 80 minutes. The session will have four blocks: 1) Overview of the Global Mining Industry; 2) State of Mining Industry in APEC Economies; 3) Sustainable Mining Framework; and 4) Examples of Sustainable Mining Practices.

1) *Overview of the Global Mining Industry*: The objective is for the participants to understand the state of the mining industry—focusing on economic contribution, problems, and threats.

2) *State of the Mining Industry in APEC Economies*: The objective is for the participants to understand the current issues faced by the mining industry in APEC economies.

3) *Sustainable Mining Framework*: The objective is for the participants to understand the Sustainable Mining Framework. Participants must also learn how to adopt the Framework into their operations.

4) *Examples of Sustainable Mining Practice*: The objective is for the participants to appreciate the value of sustainable mining practice through actual case studies. Sustainability issues and how these are addressed should be discussed.

The extra 10 minutes could be used for the Q&A.

KEY MESSAGES

- There are numerous sustainability challenges. APEC economies may have similar experiences but the context of these issues may be different.
- There is no specific stakeholder that promotes the interest of the “environment.” It is everyone’s responsibility to take care of the environment.
- The community is an important consideration for sustainable mining practices
- Mining is diverse in location and methods
- Sustainability is a holistic concept.

REQUIRED MATERIAL

Herrera, Maria Elena and Marie Kirstin de Jesus. (2011). “Multi-stakeholder Initiatives and CSR Relevant Legislation.” In CSR in Mining for APEC Economies.

REFERENCES

Laurence, David. (2012) “The Mining Industry and its Sustainability Challenges.” Presentation of A/P David Laurence to the CSR in APEC Mining: Train the Trainers Program in Legaspi Albay, June 04-08)

RECOMMENDED READINGS

Australian Government- Department of Resources, Energy and Tourism. (2011). “A Guide to Leading Practice Sustainable Development in Mining”. Part of the Leading Practice Sustainable development Program for the Mining Industry. Accessed at http://www.ret.gov.au/resources/Documents/LPSDP/guideLPSD.pdf

SPECIAL REQUIREMENTS

- Preparation:
- Equipment and supplies required:
  For the Room Set-up: LCD Projector and Screen; Laptop; Mic/lapel; Whiteboard and markers; USB for transferring the presentations; Recorder
- Room lay-out: Classroom style
- Staff support required: Transfer of the ppt to the laptop and documentation of the event.

FIGURES AND FRAMEWORKS

Refer to List of Figures and Frameworks Used in Session Briefs

- Figure 7: Sustainable Mining Practices Framework

Session Brief – For Teachers

A Framework for Strategic CSR in the Mining Sector

CSR IN APEC MINING: TRAIN THE TRAINERS PROGRAM

Session Code: 1D
Session Title: A Framework for Strategic CSR in the Mining Sector
Session Topic: The Stages Approach
Session Format: Lecture-Discussion

ABSTRACT

The primary objective of the session is to provide a framework for integrating Corporate Social Responsibility (CSR) into mining operations. The session will begin with brief review of the definition of CSR and strategic CSR and then provide an overview of the Stages approach to CSR in mining.

The strategic approach to CSR involves a clear understanding of the corporate footprint (environment, social and economic) as well as stakeholder concerns. The strategic approach to CSR begins with including CSR in corporate strategy and embedding CSR in corporate operations. The strategic approach to CSR is also about sustainability.

The stages approach to CSR involves crafting an approach that takes into account the different stages of mining operations: Pre-exploration, Exploration, Production, Decommissioning and Rehabilitation. At each stage, the concerns and objectives evolve. Since mineral deposits are necessarily finite in every area of operations, sustainability in mining involves ensuring that the positive effects of mining are maximized and continue beyond the life of the mine while the negative effects are minimized.

CSR focus areas can include: (i) Value chain management including working with suppliers and distributors and environmental protection; (ii) Workplace safety and employee relations, product and consumer safety and responsible communication, (iii) Compliance, governance and contribution to society, (iv) Community Relations. In terms of community relations, activities can involve: community development and capacity-building, education, health, environment.

Since each area of mining operation is unique, details of CSR programs will necessarily be unique to the area. However, the strategic stages approach is generally applicable to all mining operations.

This session brief was written by Maria Cristina I. Alarilla under the supervision of Assoc. Prof. Maria Elena B. Herrera for the project entitled, "CSR in APEC Mining: Train the Trainers Program" This APEC funded project was implemented by the RVR Center for Corporate Social Responsibility.

LEARNING OBJECTIVES

- To provide an understanding of the definition of CSR and Strategic CSR and how it is applied in the mining industry
- In particular, to introduce and explain the Stages Approach to CSR in the mining sector and to explain the systems frame underlying the Stages Approach
- To provide an understanding of the global mining sector to help participants put into context the positive and negative (economic, social and environmental) impact of mining operations
- To provide an understanding of the changing interests and concerns of stakeholders
- To provide an understanding of how to develop and implement a sustainable CSR strategy

STUDY QUESTIONS AND/OR HOMEWORK ASSIGNMENT

- What are the sustainability challenges faced by the mining industry in your economy?
- What is the sustainability initiatives adopted in your economy?
- What is the role of mining stakeholders/players—government, industry associations, mining companies?

CONTENT SUMMARY

The session begins with a brief review of definition of CSR and the AIM RVR approach to Strategic CSR. The session then covers the stages of mining operations as well as changing stakeholder interests, influences and concerns across the different stages. The systems-based Stages approach to strategic CSR in the mining sector is then presented. The discussion ends with a brief overview of the APEC mining sector.

Note: In the AIM RVR designed program for APEC, this overview is meant to facilitate participant preparation for the workshop that follows.

The World Business Council for Sustainable Development (WBCSD) defines CSR as the "continuing commitment by business to contribute to economic development while improving the quality of life of the workforce and their families as well as of the community and society at large." For CSR to be sustainable it must be strategic—embedded into the company's operations and integrated into the company's organization.

The AIM RVR strategic approach to CSR (See Reading: A Strategic Approach to CSR) is referenced.

Mining operations are divided into four stages: Pre-exploration, Exploration, Extraction, and Decommissioning and Rehabilitation. In each of these stages, mining companies focus on accomplishing specific activities and addressing multiple concerns. It is important to note that there are similar issues that needs to be dealt with in all of the stages—social license to operate and compliance with government regulations. However, the levels and character of stakeholder concerns and influence change over the life of the mine.

Below are some of the activities that mining companies focus on in each of the mining stages:

1) Pre-exploration: securing government permits and financing, calculating the mineral deposits, completing environmental and social impact studies

2) Exploration: meeting shareholder expectations, addressing local community concerns, resettlement of the direct impact communities, mine construction, securing social license to operate
3) Extraction: ensuring continuous operations, community programs, compliance with government policies
4) Decommissioning and Rehabilitation: developing and implementing an exit strategy, financing the exit strategy

Stakeholder interests change across the mining stages. Thus, mining companies must develop a strategy that is able to anticipate, monitor and address these changing interests. However, some stakeholder interests remain the same across the mine stages—community development programs and environmental protection.

The mining industry plays an important role in global economy. Operations of mining companies greatly affect the environment—extraction of mineral and metal deposits, processing of minerals, and disposal of by-products or wastes. In addition, host communities can be affected in many ways: resettlement, increased opportunities for employment, and changes in lifestyle. At the end of the mine's life, the objective is to eliminate or minimize the negative impact as well as to sustain the positive impact of mining operations. Some of this can be accomplished through restoration and rehabilitation of the mine site. However, the more difficult task of sustained positive impact requires that the local community is able to develop a basis for continuing economic development upon the mine's closure. Realistically, this can only be achieved through a collaborative approach during the operation of the mine, when economic flows to the local government and community are highest.

The Stages approach recommends a CSR approach that explicitly addresses all stages of mine life and that CSR planning cover the full lifetime of the mine at Pre-exploration stage. This full lifetime approach ensures that the mismatches, especially of economic flows, across the lifetime of the mine are planned for and addressed properly.

The APEC economies are significant players in the global mining industry. More than 50% of the world's resources in gold, nickel, copper, bauxite and zinc are found in APEC economies. About 49% of total mining investments are in APEC economies.

CSR strategy and programs of many large mining companies already anticipate the interests and concerns of the mining stakeholders. However, many challenges remain.

SESSION SEQUENCE PLAN

The session is scheduled for 80 minutes. The session will have four blocks: 1) Definition of CSR and Strategic CSR; 2) the Stages Approach to CSR in Mining; 3) An Overview of the Mining Sector, and 4) CSR and Mining in APEC Economies.

- Definition of CSR and Strategic CSR: The objective is for participants to recall the definition of CSR and Strategic CSR.
- Stages Approach of CSR in Mining: The objective of the session is to provide the participants an understanding of the different stages of mining operations, how these affect stakeholders, what the economic flows are and what the mismatches and challenges are. (See Figure 9: Systems Frame) Clarity about the different stakeholders, their varying levels of influence and the manner in which mining operations impact them at each stage needs to be achieved. A discussion on the changing interests of stakeholders should also be presented. (See Table 4: Mining Stakeholders and Interests Across the Mining Stages) Finally, the importance of prior

planning across all the stages as well as constant monitoring at each stage needs to be emphasized as CSR activities at each stage are discussed.

Key stakeholder categories are: (See Table 2: List of Stakeholders and their Concerns)

- Primary Internal: Shareholders, Investors and Employees
- Primary External Stakeholders: Suppliers, Distributors or Consumers
- Secondary Stakeholders: Host Community and Environment
- Moderating or Mediating Stakeholders: Church, NGOs, Media or Government

Key Concern Categories are Economic, Environment, and Social. Mismatches: (See Figure 10: Mapping Footprint and Stakeholders in the Mine Life Cycle)

- Mining companies needs to ensure that their footprint (in terms of economic, environmental and social) is managed/minimized when they operate or cease operation.
- In terms of financial, mining companies must address two challenges—1) Ensure investor commitment during the pre-exploration and exploration stage when there is uncertainty if they will continue to operate; and 2) Comply with government regulations at the decommissioning and rehabilitation stage, when it is no longer earning revenues.
- Government income from mining operations starts at the pre-exploration until the decommissioning stage. Government must ensure that a portion of this earning is allocated for the rehabilitation stage.
- Stakeholder and environmental concerns continue to increase even after the company ceases operations.
- Stakeholders and environment continue to experience the impact of mining operations even after it stops operations.

- An Overview of the Mining Sector: The objective is for the participants to recognize the contribution of the mining sector to the global economy and its impact to the environment and host community.

- CSR and Mining in APEC Economies: The objective is for the participants to determine the changing dynamics of the mining industry—in terms of the concerns and needs of its stakeholders and how companies could respond to their needs.

KEY MESSAGES

- Minerals are a critical resource and mining is a key sector for many developing economies. The mining industry has a heavy impact, both on the environment as well as on the host community.
- The challenge for mining companies is to address the mismatches (especially timing) in the needs of the stakeholders and the operations and responses of mining companies. Mining companies need to work with many stakeholders, most of whom are significantly affected by mining operations and many can significantly influence these operations.
- Responsible Mining and Sustainable Mining are used in a similar manner.
- Mining companies need to learn to develop CSR programs (or community development initiatives) that are balanced and have a long-term approach. This requires a collaborative, not simply a consultative, approach.

- The challenge for mining companies is to effectively eliminate or minimize the negative impact and maximize and sustain the positive impact, even beyond the life of the mine

REQUIRED MATERIAL

Herrera, Maria Elena. (2011). "Reading 2: A Strategic Approach to CSR." Corporate Social Responsibility in the Mining Sector for APEC Economies", *CSR in Mining for APEC Economies*. Asia Pacific Economic Cooperation Secretariat.

REFERENCES

APEC. (June 2012). "2012 APEC Meeting of Ministers Responsible for Mining: Joint Statement." http://www.apec.org/Meeting-Papers/Ministerial-Statements/Mining/2012_mining.aspx

APEC. (2011). "Balancing Competing Demands of Mining, Community and Environment to Achieve Sustainable Development in the Mining Sector." http://publications.apec.org/publication-detail.php?pub_id=1142

Australian Government- Department of Resources, Energy and Tourism. (2011). "A Guide to Leading Practice Sustainable Development in Mining". Part of the Leading Practice Sustainable development Program for the Mining Industry. Accessed at http://www.ret.gov.au/resources/Documents/LPSDP/guideLPSD.pdf

SPECIAL REQUIREMENTS

- Equipment and supplies required:
  For the Room Set-up: LCD Projector and Screen; Laptop; Mic/lapel; Whiteboard and markers; USB for transferring the presentations; Recorder
- Room lay-out: Classroom style
- Staff support required: Transfer of the slides to the laptop and documentation of the event.

FIGURES AND FRAMEWORKS

Refer to List of Figures and Frameworks Used in Session Briefs

- Figure 9: Systems Frame
- Figure 10: Mapping Footprint and Stakeholders in the Mine Life Cycle
- Table 2: List of Stakeholders and their Concerns

Session Brief – For Teachers

MINING ISSUES IN APEC ECONOMIES

CSR IN APEC MINING: TRAIN THE TRAINERS PROGRAM

Session Code: 1E
Session Title: Mining Issues in APEC Economies
Session Topic: Mining Issues in APEC Economies
Session Format: Workshop

ABSTRACT

The primary objective of the session is to allow participants to identify the mining issues in their economies. The session will help the participants develop an understanding of the state of sustainability in the mining industry in the different APEC economies.

Mining companies need to address social, environmental, and political concerns to operate efficiently. These problems affect mining operations, which may result in work stoppage or financial loss.

- Economic concerns may include job generation, contribution to taxes, allocation of revenue, development of local industries, proper accounting, and the boom-town effect
- Environmental concerns may include pollution, land surface alterations, and loss of biodiversity.
- Social concerns may include social license to operate, resettlement of affected communities, anti-mining sentiments of stakeholders, community development and security threats.

Although these concerns are similar across all mining operations, the exact scenario by which they exist differs in every mine site. Mining companies have devised mitigating strategies to address these concerns. Other mining companies could learn from these approaches to improve their mining practices.

LEARNING OBJECTIVES

- To provide an understanding of the current state of and issues faced by the mining industry in different APEC economies
- To provide an understanding of the different sustainable initiatives by mining stakeholders to ensure responsible mining operations.

STUDY QUESTIONS AND/OR HOMEWORK ASSIGNMENT

- What are the issues faced by the mining industry in your economies?
- How should these be addressed? What are the roles of mining stakeholders in addressing these concerns?

This session brief was written by Maria Cristina I. Alarilla under the supervision of Assoc. Prof. Maria Elena B. Herrera for the project entitled, "CSR in APEC Mining: Train the Trainers Program" This APEC funded project was implemented by the RVR Center for Corporate Social Responsibility.

CONTENT SUMMARY

Discussion will focus on the issues faced by the mining industry in their economies as well as suggested strategies in addressing these concerns.

Participants should be asked to answer the following questions:

- What are the issues faced by the mining industry in your economies?
- What are the responses of mining stakeholders to address these issues?
- What is needed to resolve these issues?

A summary of the responses should be presented at the end of the session.

SESSION SEQUENCE PLAN

The session is scheduled for 180 minutes. The session will have four blocks: 1) Introduction and Briefing; 2) Group Discussion; 3) Group Presentation and Clarification; 4) Wrap-up and Analysis.

- *Introduction and Briefing*: The objective of the session block is to give a short discussion on the need for the participants to have a "shared understanding" of the state of the mining industry. Instructions of the workshop will be given. It will include study questions, presentation time and presentation format (either ppt presentation or manila paper).
- *Group Discussion*: This time is allocated for the participants to discuss the study questions and prepare for the group presentation.
- *Group Presentation and Clarification*: This time is allocated for the group presentations. Depending on the number of groups, the time allotted for each presentation will vary. After each presentation, a couple of minutes are allocated for clarification or comments.
- *Wrap-up and Analysis*: The objective of the session block is to wrap-up the discussion.

KEY MESSAGES

Below are the general messages of the session; however specific messages may vary.

- Mining companies face similar concerns; but the context of their problems differs. Sustainability approaches can be adopted from other companies; but these must be tweaked to fit the local context.
- Stakeholders affect operations of mining companies. Stakeholder influence varies. All stakeholders have environmental concerns.
- The challenge for mining companies is how to transform the stakeholders into partners.

SPECIAL REQUIREMENTS

- Preparation:
  - Prepare a presentation with the study questions.
  - Divide the participants into can groups
- Equipment and supplies required:
  - For the Room Set-up: LCD Projector and Screen; Laptop; Mic/lapel; Whiteboard and markers; USB for transferring the presentations; Recorder
  - For Each Can Group: Manila Paper; Marker, Masking Tape
- Room lay-out: Classroom style + Can Group
- Staff support required: Transfer of the presentation to the laptop and documentation of the event.

Session Brief – For Teachers

ASSESSMENT OF FOOTPRINT AND STAKEHOLDERS

CSR IN APEC MINING: TRAIN THE TRAINERS PROGRAM

Session Code: 2A
Session Title: Pre-exploration: Assessment of Footprint and Stakeholders
Session Topic: Assessment of Footprint and Stakeholders
Session Format: Lecture Discussion

ABSTRACT

The primary objective of the session is to provide a framework on assessing a company's footprint and mapping its stakeholders. The session will begin with the presentation of how to analyze the company's footprint and to map its stakeholders. There will also be a presentation on stakeholder engagement strategies.

During the pre-exploration stage, mining companies secure government permits and financing, calculate deposits, and complete the environmental and social impact studies. At this stage, mining companies are only required by law to submit permits. They are not required to conduct stakeholder engagement programs.

Mining companies need to conduct stakeholder mapping to understand the social concerns of their direct impact areas; while footprint analysis helps companies identify how their operations affect the environment and the community. By completing these analyses, mining companies will be able to craft a sustainable mining strategy.

LEARNING OBJECTIVES

- To provide an understanding of the rationale and methodology for footprint analysis;
- To provide an understanding of the rationale and methodology for stakeholder mapping;
- To provide an understanding of the importance of stakeholder engagement in mitigating the impact of mining operations and addressing stakeholder concerns

STUDY QUESTIONS AND/OR HOMEWORK ASSIGNMENT

- What is the value chain of mining companies? What are the mining processes?
- What are the available methods for addressing environmental impact of mining operations?
- Who are the company's stakeholders? What are their concerns?
- How do you address the gaps in the value chain process of companies (i.e. economic, environmental and social aspects)?

This session brief was written by Maria Cristina I. Alarilla under the supervision of Assoc. Prof. Maria Elena B. Herrera for the project entitled, "CSR in APEC Mining: Train the Trainers Program" This APEC funded project was implemented by the RVR Center for Corporate Social Responsibility.

CONTENT SUMMARY

The session begins with a presentation on the key activities completed by mining companies at the pre-exploration stage. The session presents methodologies in footprint analysis and stakeholder mapping. The discussion ends with a presentation of stakeholder engagement strategies.

Activities during the Pre-exploration and Exploration Stage

In the pre-exploration and exploration stage, mining companies identify and assess the mineralized areas to determine the size and quality of the mineral deposits.

Mining companies also need to determine the mining processes and chemicals—which will determine its footprint. These may include:

- Physical extraction process. This is dependent on the location, structure, and type of the mineral deposits. The most commonly used extraction methods are tunneling and open pit. Each type of extraction process creates different environmental effects.
- Mineral refining process. This is dependent on two factors—type of minerals extracted and choice of the refining process. It is important to note that various chemicals could be used to refine a specific mineral.

Mining companies need to develop a strategy that mitigates the impact of their mining processes.

Exploration activities include geophysical surveys, geological mapping and drilling. Ore quality and quantity are evaluated in terms of economic viability. Mining companies also conduct feasibility studies (i.e. mine designs, computation costs and determining the potential social, environmental, and economic impact of the mine). (See Key Messages in the Pre-Exploration and Exploration Stage)

Environmental Impact and Mitigating Measures during the Pre-exploration and Exploration Stage

During the mineral exploration stage, mining companies need to manage their environmental impact such as: 1) Clearing of vegetation and other types of disturbance to fauna; 2) Soil erosion and stream sedimentation; 3) Spreading of weeds; 4) Noise, light and dust level; and 5) Contamination of soil and water.[1]

A summary of some of the environmental effects and the respective mitigating measures during the pre-exploration and exploration stage are provided below. This is a summary of some sections of "A Guide to Leading Practice Sustainable Development in Mining."

- Airborne contaminants, Noise and Vibration: Refine emission control specifications; Engagement with air quality consultants and acoustic specialists; Use of noise attenuation products; Ambient noise monitoring; Creation of a noise and vibration management plan

[1]Australian Government- Department of Resources, Energy and Tourism. (July 2011). "A Guide to Leading Practice Sustainable Development in Mining". Part of the Leading Practice Sustainable development Program for the Mining Industry. Accessed at http://www.ret.gov.au/resources/Documents/LPSDP/guideLPSD.pdf

- Biodiversity Management: Assessing impacts to enable minimization, mitigation and rehabilitation; ESIA should be an iterative process; Baseline studies and social impact assessments
- Water quality issues (i.e. erosion from temporary roads; runoff of drilling fluids, petroleum products from drill pad construction and operation, camp wastes): Initial baseline monitoring program (weather station, several water quality/ biology sites, water flows)
- Predicting acid and metalliferous drainage: Geochemical assessment of mine materials; Basic screening level investigation; site specific samples
- Other mitigating measures: compilation of geological and geochemical database; knowledge of likely wastes; detailed closure plan (continue to be a "living document" as the mine proceeds); AMD monitoring program and management plan. [1]

Footprint Analysis Framework

At this stage, mining companies need to study and select the mining method, refinery process, and chemicals used in the course of its mining operations. These factors will affect their footprint.

Primary Internal Stakeholders	Employees: High wage; Comfortable workplace environment; Health and Safety Investors: Expected mineral deposits to be mined; Preliminary Investment ("sunk cost"); Actual mineral deposits to be mined; Cost of operations (i.e. drilling and construction of mine site).
Primary External Stakeholders	Suppliers (i.e. Construction Equipment, Manpower Services, Foodstuff): On-time payment; adherence to code of conduct; meet expectations of mining company Consumers: Ethical production process and adherence to labor laws (i.e. child labor)
Secondary Stakeholders	Direct Impact Community: Information Campaign; Social investments; Profit Sharing Agreements; Company's ability to comply with local laws; Information Campaign; Social Investments; Employment; Social License to Operate; Resettlement Packages; Land Use Payments; Social Ills Environment: Land disruption and environmental degradation (i.e. drilling of mineral samples) Indigenous People: Mapping of IPs; Protection of culture and ancestral domain; Preservation of culture and ancestral domain; FPIC; Resettlement; Employment; Community Programs and SLTO
Moderating or Mediating Stakeholders	Critical Stakeholders (Media, NGO, Socio-civic Orgs, Church): Information Dissemination; Environmental Protection, Protection of Human Rights and IPs; Social Ills Government: Compliance to Local Laws (i.e. Environmental; Employment; Mining Laws); Profit Sharing Scheme; Payment of Taxes

[1] Australian Government- Department of Resources, Energy and Tourism. (July 2011). "A Guide to Leading Practice Sustainable Development in Mining". Part of the Leading Practice Sustainable development Program for the Mining Industry. Accessed at http://www.ret.gov.au/resources/Documents/LPSDP/guideLPSD.pdf

	Security Threats: Land agreement passage; payment of revolutionary taxes; kidnapping of mine employees; extortion; arson; destruction of mine facilitates and equipment.

Footprint analysis identifies the key processes that occur within the mining company—either technical (i.e. processing of minerals) or non-technical (i.e. environment or employee-related). These processes must be evaluated based on the following: Input and Output; By-product; Possible alternative process, Alterations and Potential Impact; and Location. (See Components of Value Chain Analysis) It also expands to include the identification of the process' impact on stakeholders and the environment. The objective of footprint analysis is to identify the potential gaps and opportunities that are present where the company can implement CSR programs. Key categories may include economic, environmental, and social effects.

Mining companies need to improve their value chain processes to take into account the economic, environmental and social footprints. A CSR plan must also be developed that would anticipate the potential impact of mining operations from pre-exploratory to the rehabilitation and decommissioning stages.

Social Impact during the Pre-exploration and Exploration Stage

Stakeholder mapping refers to the identification of individuals or groups affected by the mining company's operations. Stakeholders may include employees, investors, customers, suppliers, the host community, NGOs, civil society groups, local government, and regulatory agencies. In stakeholder mapping, it is important to identify how the stakeholders are affected and their potential influence on the company. The objective of stakeholder mapping is to identify the critical stakeholders which the company could partner with in promoting its interests and addressing the needs of its stakeholders. (See Examples of Stakeholders and Key Questions in Analyzing Stakeholders)

Key concerns of stakeholders are:

Stakeholder engagement strategy is key for mining companies to ensure that their operations are uninterrupted. Stakeholder engagement must be started as early as the pre-exploration stage. Mining companies need to talk to and discuss with potential stakeholder their issues and concerns. By building a solid rapport with the stakeholders, mining companies will be able to operate continuously with minimal issues or problems. Stakeholder engagement is also a means in securing a social license to operate.

KEY MESSAGES

- The definition of sustainability for the mining industry is based on its unique characteristics: 1) it has a heavy footprint and 2) mineral deposits are finite. Based on these characteristics, sustainability for mining companies refers to the need to first ensure that the positive impact of mining operations lasts beyond the life of the mine and second, to ensure that the negative effects of mining operations are sufficiently addressed during the life of the mine and that no negative impact lasts beyond the life of the mine.
- At the pre-exploration and exploration stage, mining companies need to study and select the following: extraction method (i.e. tunnel or open pit); mining processes (i.e. flotation); chemicals used; waste disposal method; and tailings management plan. These factors affect the footprint of mining companies and feed into the final feasibility analysis and mine plan.

- Even if companies are still at the pre-exploration stage, a CSR plan across all stages must be completed. Mining companies should be able to anticipate the potential impact of the mining operation as well as develop mitigation strategies for each stage. The CSR plan must follow the "full stages approach." A rehabilitation plan must be included in the CSR plan.
- Mining companies also need to identify their sustainability target for the rehabilitation stage. As mining companies go through the mine stages, they could implement a component of the rehabilitation plan to reach the sustainability target. This implies that mining companies need to implement environmental rehabilitation, and economic and other social development programs in preparation for an eventual pull-out.
- Mining companies rely on social legitimacy and acceptance. As such, mining companies need to ensure that they are able to properly identify its stakeholders and their concerns. These stakeholders could be tapped as partners in promoting sustainability.

REQUIRED MATERIAL

Herrera, Maria Elena. (2011). "Corporate Social Responsibility in the Mining Sector for APEC Economies", *CSR in Mining for APEC Economies*. Asia Pacific Economic Cooperation Secretariat.

RECOMMENDED READING

Australian Government- Department of Resources, Energy and Tourism. (2011). "A Guide to Leading Practice Sustainable Development in Mining". Part of the Leading Practice Sustainable development Program for the Mining Industry. Accessed at http://www.ret.gov.au/resources/Documents/LPSDP/guideLPSD.pdf

REFERENCES

RVR Center (2011). "Towards Strategic CSR: Aligning CSR with the Business and Embedding CSR into the Organization (A Manual for Practitioners)"

Australian Government- Department of Resources, Energy and Tourism. (July 2011). "A Guide to Leading Practice Sustainable Development in Mining". Part of the Leading Practice Sustainable development Program for the Mining Industry. Accessed at http://www.ret.gov.au/resources/Documents/LPSDP/guideLPSD.pdf

SPECIAL REQUIREMENTS

a. Equipment and supplies required:
   For the Room Set-up: LCD Projector and Screen; Laptop; Mic/lapel; Whiteboard and markers; USB for transferring the presentations; Recorder
b. Room lay-out: Classroom style
c. Staff support required: Transfer of the ppt to the laptop and documentation of the event.

FIGURES AND FRAMEWORKS

Below are the figures and frameworks that could be used in this session. Please refer to the section on the List of Figures and Frameworks.

- Box 2: Components of Value Chain Analysis
- Table 1: Examples of Stakeholders
- Box 3: Key Questions in Analyzing Stakeholders
- Box 4: Key Messages Pre-exploration and Exploration Stage

Session Brief – For Teachers

AUSTRALIA ECONOMY REPORT

CSR IN APEC MINING: TRAIN THE TRAINERS PROGRAM

Session Code: 2B
Session Title: Pre-exploration: Assessment of Footprint and Stakeholders
Session Topic: Australia Economy Report
Session Format: Lecture and/or Case Discussion
Special Preparations

- If lecture: No special preparation needed
- If lecture and case discussion: Please refer to Item the section on Special Requirements.
- Materials to be distributed beforehand: Influences Frame and the Australia Economy Report

ABSTRACT

The main objective of the session is to highlight the importance of assessing the footprint and stakeholders of mining companies.

The Australia case provides an opportunity to discuss the concerns and interests of stakeholders as well as how operations of mining companies affect the environment and the community. It provides an opportunity to think about the external and internal factors that affect Australia's mining industry.

The Australia Economy Report provides an opportunity to discuss the state of the Australian mining industry and to analyze its key issues and concerns. It also looks at the interests of mining stakeholders and their sustainability initiatives.

The central questions are: (i) Who are the stakeholders of Australia's mining industry?; (ii) What is the role of the government in promoting sustainable mining practices? and (iii) What are the sustainability initiatives of the Australian mining industry?

The case, Australian Economy Report, presents the state of mining in the economy by identifying the external influences that affect its development. The state of Australian mining industry is presented using the Influences Frame developed by the AIM RVR CSR Center. The Influences Frame is a "drill down" model that identifies how each influence affects social, environmental, and political concerns. The mining industry and companies must find ways to address the emerging concerns.

This session brief was written by Maria Cristina I. Alarilla under the supervision of Assoc. Prof. Maria Elena B. Herrera for the project entitled, "CSR in APEC Mining: Train the Trainers Program" This APEC funded project was implemented by the RVR Center for Corporate Social Responsibility.

LEARNING OBJECTIVES

- To provide an understanding of how mining operations affect the host community in terms of economic, environmental and social aspects;
- To provide an understanding of how external and internal factors affect mining operations;
- To provide an understanding and examples on sustainable mining initiatives; and
- To provide examples of how mining stakeholders could participate in promoting sustainability initiatives.

STUDY QUESTIONS AND/OR HOMEWORK ASSIGNMENT

- How does mining affect the Australian economy, environment, politics and society?
- Who are the stakeholders in Australia's mining industry? What are their concerns and interests?
- What are the sustainability initiatives adopted by Australia's mining industry?
- What are the roles of mining stakeholders in promoting sustainability initiatives?
- How could other economies learn from the Australia's mining industry?

CASE ANALYSIS

The Influences Framework presents the key influences that affect the industry's development:

- Fundamental influences: Geology and Geography; Natural Resources; History and Culture
- Institutional Dynamics: Basis of Economy; Political Structure; Social Structure; Market Structure; Corporate Structure; and Labor Structure; and
- Business Landscape: Overall Social, Political and Environmental Concerns; Stakeholder Influences and Concerns; Key Business Concerns; Regulatory Environment Issues and Concerns. (See Influences Framework)

The Influences Framework helps companies assess their footprint and stakeholders. It is also a tool for identifying the gaps and mismatches between the mining company's footprint and stakeholder interest. This is particularly helpful for mining companies in the pre-exploration and exploration stages. Continued evaluation of the company's impact—footprint and stakeholder—is important as it moves into the different mining stages.

When used by mining companies, the Influences Framework provides a guide in assessing the economic, environmental, political and social structures and issues present in the mine location. It takes into account the formal and informal structures as well as the business and stakeholders' interests.

The footprint of mining companies refers to their impact (either positive or negative) on the economy, environment, and the community in which they operate. In the pre-exploration and exploration stage, baseline monitoring is key in assessing the current state of the mine location's environment—particularly biodiversity, flora and fauna, ecosystem, etc. Mining companies are also expected to conduct an environmental and social impact assessment, which identifies the potential impact, possible alternatives and compares the potential to the baseline assessment.

The key components of the Influences Framework that can help analyze a project's footprint are:

- Geology and Geography; and Natural Resources refer to the physical environment that will be affected by mining operations.
- Regulatory Environment Issues and Concerns refer to the international and local laws, codes and guidelines that affect how mining companies will mitigate its environmental footprint. It also identifies the environmental concerns present in the mine location that need to be addressed or mitigated.
- Overall Social, Political and Environmental Concerns refer to the general state of the mine location (and the direct and impact areas) in terms of social, political and environment.

By looking at these components, mining companies would be able to have a general idea on how they need to develop a sustainable mining framework that will be integrated into their operations. The objective is to fully mitigate the negative impact and continuously maximize the positive impact.

Stakeholders of mining companies refer to the individuals, groups of individuals or parties that are affected and could affect mining operations. As discussed in the previous sessions, stakeholders could be classified into: Primary, Secondary, and Mediating or Mitigating. (See Examples of Stakeholders)

Depending on their power, capability and position, stakeholders can influence mining operations. Stakeholders also have various interests and concerns. A stakeholder's influence, interests and concerns are critical in developing and implementing an engagement strategy that creates partnership opportunities in carrying out sustainable mining initiatives.

Key components of the Influences Framework that can help in stakeholder assessment are:

- History and Culture could affect the psychological mindset of mining stakeholders—whether they support or are against mining. One particular aspect that may come into play is the presence of legacy issues. Culture also affects stakeholder engagement in terms of how mining companies could approach and interact with the stakeholders. This has implications when dealing with indigenous people and developing a relocation strategy.
- All components of institutional dynamics affect the means by which mining companies interact with the government, employees, society, and other mining companies and associations. The basis of the economy helps the mining company identify their role and position in the local and national economy.
- Stakeholder influence and concern refer to the stakeholder's capability to affect mining operations as well as their interests. It is important to identify which stakeholders direct or indirectly affect mining operations. Stakeholders more often interchange their "needs" and "wants." Company and stakeholders could work together in identifying the critical issues that must be addressed.
- Key business concerns refer to the interests of the company. For all companies, including mining companies, the main concern is to earn a profit, to be competitive, and to a certain extent contribute to social development.

The Australia Economy Report presents the state of the Australia's mining industry. It follows the Influences Framework developed by the AIM-RVR CSR Center. Using the Influences Frame, the case presents the external and internal factors affecting the state of Australian mining industry. (See Case Facts of the Australia Economy Report using the Influences Frame)

SESSION SEQUENCE PLAN (80 MINUTES)

The session will have three discussion blocks: 1) Influences Frame; 2A) Lecture or 2B) Can Group Discussion and 3) Sustainable Mining Practices.

1) Discussion of the Influences Frame. The objective of the session is to present the Influences Frame and how it would help mining companies in assessing its footprint and stakeholders. The Influences Frame is a "drill down" model, which encourages the participants to ask the question, "why" and "so what?" It also seeks to present the key influences that affect the operations of any industry or company.

2A) Lecture. The objective of the session is to present the Australia Economy Report using the Influences Frame.

2B) Can Group Discussion:

- *OPTION 1: Identifying the key influences that affect mining operations in Australia.* The objective is for the participants to identify the key influences (formal, informal structures and culture) that affect mining operations in Australia. The can groups should be asked to fill-up the Influences Framework.
- *OPTION 2*: *Assessing the important role of the government in promoting responsible mining initiatives*. The objective is for the participants to assess role of the government in promoting responsible mining. The World Bank framework on Governance should be used. The World Bank identifies four government roles: mediating, facilitating, partnering, and endorsing. The students should identify the initiatives of the Australian government and classify them based on the four government roles.
- *OPTION 3: Lessons Learned.* The objective is to identify what are the important lessons that other economies could learn from the Australian mining industry. The participants should identify the key issues faced by mining companies in the different mine life cycles—pre exploratory, exploratory, operation, and decommissioning and rehabilitation. The participants should determine the lessons that they could adopt or create measure to prevent these issues to occur.

3) Sustainable Mining Practices. The objective of the session is to highlight the sustainability mining initiatives identified in the Australia Economy Report. Participants could also assess how to implement sustainable mining practices in their companies. It is important to highlight that sustainable mining practice is a holistic approach—it must take into consideration a mining company's impact to the economy, environment, and community in which it operates.

KEY MESSAGES

<u>Key Observations of the Case</u>

- Mining is the major driver of Australia's economy. As a result, the mining industry needs to adopt sustainable mining practices.
- Australian mining stakeholders need to be proactive in addressing pressing issues related to mining (i.e. labor concern, environmental protection)
- Although Australian mining companies are seen as leaders in the industry, they need to ensure that their global and local operations adhere to sustainable mining practices.
- Australia could be considered a leader in promoting sustainable mining practices; but it still continues to learn from its past and current mistakes.

- Sustainable mining does not only include environmental and socially responsible initiatives. One of the important components is governance—transparency and accountability.

Key Messages of the Session

- The definition of sustainability for the mining industry is based on its unique characteristics: 1) it has a heavy footprint and 2) mineral deposits are finite. Based on these characteristics, sustainability for mining companies refers to the need to first ensure that the positive impact of mining operations last beyond the life of the mine and second, to ensure that the negative effects of mining operations are sufficiently addressed during the life of the mine and that no negative impact lasts beyond the mine's life.
- Mining companies need to conduct an assessment of their footprint and stakeholders in the pre-exploration and exploration stage.
- The Influences (Hexagon) framework can help mining companies understand their environment better and identify key concerns and key stakeholders. It will also help them develop an environment mitigation and community engagement strategy.
- At the pre-exploration and exploration stage, mining companies need to craft a full mine operation guide that will be continuously revised and assessed as they go through the various mining stages.

REQUIRED MATERIAL

Case: Uy, Ryan Vincent (2011). "Australia Economy Report", *CSR in Mining for APEC Economies*. Asia Pacific Economic Cooperation Secretariat.

RECOMMENDED READING

Herrera, Maria Elena. (2011). "Corporate Social Mining Sector for APEC Economies", *CSR in Mining for APEC Economies*. Asia Pacific Economic Cooperation Secretariat.

Herrera, M.B., Alarilla, M.I. and Uy, R.L. (2011). *Towards Strategic CSR: Aligning CSR with the Business and Embedding CSR in the Organization: A Manual for Practitioners*. Makati City: Asian Institute of Management.
(Section on Influences Framework p.10-11

REFERENCES

Herrera, M.B., Alarilla, M.I. and Uy, R.L. (2011). *Towards Strategic CSR: Aligning CSR with the Business and Embedding CSR in the Organization: A Manual for Practitioners*. Makati City: Asian Institute of Management.

Herrera, M.B., Roman, F.L., Allarila, M.I., de Jesus, M.C. and Uy, R.L. (2011). *Corporate Social Responsibility in Southeast Asia: An Eight Country Analysis*. Makati City: Asian Institute of Management.

Australian Government- Department of Resources, Energy and Tourism. (2011). "A Guide to Leading Practice Sustainable Development in Mining". Part of the Leading Practice Sustainable development Program for the Mining Industry. Accessed at http://www.ret.gov.au/resources/Documents/LPSDP/guideLPSD.pdf

PREREQUISITES, IF ANY

A Discussion on the Stages of Mining

SPECIAL REQUIREMENTS

a. **Preparation:** Prepare a PowerPoint with the Influence Framework and the case facts of the Australia Economy Report. Insert a slide on the summary of the session or important learning.
b. **Equipment and supplies required:**
   For the Room Set-up: LCD Projector and Screen; Laptop; Mic/lapel; Whiteboard and markers; USB for transferring the presentations; Recorder
   For each can group: Participants must be divided into groups with 5-6 members each. Each Can Group must have manila paper or flip chart, markers, meta cards, masking tape.
c. **Room lay-out:** Classroom style and can group area
d. **Staff support required:** Transfer of the ppt to the laptop and documentation of the event.

Figures and Frameworks

Below are the figures and frameworks that could be used in this session. Please refer to the section on the List of Figures and Frameworks.

- Figure 8: Influences (Hexagon) Framework
- Table 1: Examples of Stakeholders

Case Facts of the Australia Economy Report using the Influences (Hexagon) Frame

Fundamental Influences

Geography and Geology	• Australia has one of the most abundant and diverse mineral resources • Australia has at least 32 types of minerals being extracted
Natural Resources	• The minerals are located in the coastal region and other remote areas • All Australian states have mineral resources
Culture	• Prior to the arrival of the Europeans the Australian Aborigines have been operating mines to extract minerals for their art and religious ceremonies.
History	• Creation of more mines in the 18th Century led to extract coal led to the establishment of new towns. • By the 1850s, Australia was producing almost 40 percent of the world's gold supply. This helped Australia shift from an agricultural to an industrial economy. • In order to manage the growth of the mining industry corresponding government agencies were established. • The 1950s to the 1970s saw the emergence of the Australian mining industry, which was characterized by the discovery of major new base metals and the establishment of Australia's petroleum industry. • Growing public awareness in the 1980s regarding environmental issues (especially with the discovery of uranium in the late 1970's) led to greater government regulation. • Political stability led to the influx of foreign companies. Although there were contractions experienced by the industry in between, overall Australia has experience significant economic returns from mining. • Due to the continuous growth of the Australian mining industry, it remains to be one of the biggest in the world.

	• Australian companies have also expanded their operations in different parts of the world.

Institutional Dynamics

Industry	• The Australian Mining Industry is one of the leading in the world. It is the top producer of bauxite, alumina, diamonds (by volume), ilmenite, rutile and zircon. It is also the second largest producer of zinc ore; the third for iron ore, nickel and gold.
Social Structure	• The growth of the mining industry early in the development of Australia has led to the creation of towns. • The growth of the mining industry has led to the movement of mining experts within Australia and overseas.
Political Dynamics	• The government plays a key role in encouraging sustainable development by promoting a balance between social, environmental and economic factors. • Stable political environment has encouraged foreign investments in the mining sector
Market Structure	• As of March 2010, total mineral export was around US$30.2 billion. • In 2009, investments in the production of 18 major minerals doubled.
Labor Dynamics	• Australia's mining sector directly and indirectly employed 321,000 Australians from remote areas.
Corporate Structure	• Numerous Australian mining companies have successfully transitioned to global corporations.

Business Landscape:

Key Social and Environmental Concerns and Initiatives	• Resource availability is a concern as mineral resources are finite. Thus, the government is considering imposing higher taxes on mining • A wide range of environmental (i.e. greenhouse gas emission and abandoned mines) and social issues • Considerable dependency of the Australian economy on mineral resources • Early in the development of the mining industry, the government has created the necessary government agencies to regulate the mining industry especially in terms of managing the environmental footprint of mining.
Regulatory environment	• The regulation of the mining industry is decentralized. However, there are similar laws in the following areas: Mineral resource development, Environmental protection, Protection of IP rights and land use/development acts. • The government respects the rights of the Australian Aborigines.
Stakeholder Influence	• The government not only regulates mining activities, but actively plays a role in ensuring sustainable mining practices. The Australian Government for example launched the "Leading Practice Sustainable Development Program" for the Mining Industry. • Aside from company level CSR-relevant initiatives, mining

	associations in Australia play a key role in providing members with frameworks and practices that ensure the implementation of responsible mining practices.
Key Business Concerns and Initiatives	• There is a shortage of mining experts and laborers. • Imposition of new taxes by the government. • Decline in the quality of available minerals and ore • Growing volume of mine waste tailings • Environmental footprint of mining (i.e. greenhouse gas emissions) • Declining global prices of minerals. • Australian companies are considered to be among the early adopters and promoters of responsible mining practices. They are also an active participant in global multi-stakeholder initiatives.

Session Brief – For Teachers

SMI AND THE BLAANS: A SUSTAINABLE DEVELOPMENT ALLIANCE

CSR in APEC Mining: Train the Trainers Program

Session Code: 2C
Session Title: Pre-exploration and Exploration
Session Topic: SMI and the Blaans: A Sustainable Development Alliance
Session Format: Plenary Discussion and/or Role Playing
Session Leader
Special Preparation

- For case discussion and/or role playing: Please refer to the Special Requirements Section.
- Materials to be distributed beforehand: SMI Teaching Case

ABSTRACT

The main objective of the session is to identify the footprint and stakeholders of a mining company, which is at the pre-exploration and exploration stage.

The SMI case provides an opportunity to discuss the impact of mining operations in terms of economic, environment, social and political aspects. It also provides an opportunity to discuss stakeholder assessment—identification of stakeholders, their needs and interests.

The case will present the sustainable initiatives of a company in addressing its current and potential environmental impact as well as sustainability initiatives.

The central questions are "(i) What is the impact of mining operations on the environment, the economy, politics and the community? (ii) How do you address the impact? and (iii) How do you identify stakeholders?"

Discussion covers the importance of footprint and stakeholder assessment at the pre-exploration and exploration stages. Assessment is important in the initial stages of mining operation because it helps identify a baseline for the potential impact of mining operations. This is particularly true for the environment. The value chain of mining companies – choice of process, chemicals, machinery—needs to be analyzed. Stakeholder assessment is also key in developing the community engagement strategy. The challenge for mining companies is how to create a win-win scenario for the company and the community.

The case, SMI and the Blaans: A Sustainable Development Alliance, presents the actual problems experienced by the mining company at its pre-exploration and exploration stages. Some of the issues faced by SMI were: environmental protection and anti-mining sentiments.

This session brief was written by Maria Cristina I. Alarilla under the supervision of Assoc. Prof. Maria Elena B. Herrera for the project entitled, "CSR in APEC Mining: Train the Trainers Program" This APEC funded project was implemented by the RVR Center for Corporate Social Responsibility.

Although SMI was able to develop alliances with the Blaans by understanding their concerns and implementing sustainable community programs, SMI is currently facing regulatory problems—the local government of South Cotabato wants to ban open pit mining.

LEARNING OBJECTIVES

- To provide a picture of the various issues and challenges that mining company faces during the pre-exploration and exploration stages; and
- To provide an understanding and approach on how to assess the value chain of mining companies;
- To provide an understanding and approach on how to conduct stakeholder assessment.

STUDY QUESTIONS AND/OR HOMEWORK ASSIGNMENT

- What are the issues and challenges faced by mining companies in the pre-exploration and exploration stages?
- What is the value chain of mining companies? How does SMI's value chain affect the environment, society and community where it operates?
- How could SMI mitigate its value chain impact?
- Who are the critical stakeholders of SMI? What are their concerns?
- What is the level of interest of the stakeholders to the mining operation? What is the company's level of interest to the stakeholders?

CASE CONTENT

At the pre-exploratory and exploratory stage, mining companies need to conduct two levels of assessment—footprint analysis (value chain) and stakeholder analysis (stakeholder identification).

In value chain analysis, mining companies need to analyze every process of their operations in terms of inputs, outputs, by-products, and impact on the environment, society and stakeholders. Value chain analysis varies per mine site. It depends on the mining process, chemicals selected, extraction method, and other auxiliary infrastructure.

Another component of value chain analysis is identifying the potential impact of mining operations on the environment, society, and stakeholders. Hard facts from the value chain analysis could be used as input data in developing a mitigating strategy that minimizes the environmental impact of mining operations.

In stakeholder analysis, mining companies need to identify the individuals, group of individuals and parties that are affected by or influence mining operations. These stakeholders could either be affected in one or all stages of the mine life cycle. Stakeholder analysis must be conducted in terms of the stakeholder's needs and interests, level of interest, degree of influence to company operations, and potential opportunities for partnership.

It is also important to note that stakeholder interests and concerns vary per mine stage.
Following the Stages Approach, mining companies need to craft a sustainable mining plan for all mining stages. They should anticipate potential processes, potential impact, and mitigating initiatives. The sustainable mining plan must be continuously evaluated, assessed and revised. This plan will act as a guide in the decommissioning and rehabilitation phase.

SESSION SEQUENCE PLAN

The session will have three discussion blocks: 1) Foundation setting; 2A) Lecture or 2B) Role Playing; and 3) Synthesis.

1) Foundation Setting: The objective of this session block is to clarify the case facts—which include the environmental and social impact of the Tampakan project, potential economic contribution, as well as the stakeholders involvement and their interests.
2A) Plenary Discussion: The objective of this session block is to discuss with the participants the value chain and stakeholders of SMI. The following questions could be raised: 1) What is the value chain of SMI? 2) What is the environmental impact of the mining operations? How does SMI plan to address these issues?; 3) Who are the stakeholders of SMI? What are their main concerns?; 4) How do the stakeholder interest affect mining operations?
2B) Role Playing: The objective of this session block is to determine if the participants were able to identify the key issues and concerns of the stakeholders assigned to them. The participants should articulate their position towards SMI as well as their interests and concerns.
The participants should be grouped into: National Government, Local Government, Church, SMI, Blaans and New People's Army. The can groups should write a position/statement on a) what is their position on mining; b) what are their interests and demands and c) how they will move forward.
3) Summary: The objective of this session block is to summarize the issues raised in the previous session. Discussion could revolve around the resolved and unresolved issues (i.e. environmental, economic and social). Participants could be asked how they would address the unresolved issues.
4) Synthesis: The objectives of the session block are to wrap up the discussion and present the key messages of the case and the session.

KEY MESSAGES

<u>Key Observations of the Case</u>

- Environment analysis is involves at least two footprint factors: 1) local situation in terms of community, topography, and biodiversity; and 2) type of mineral deposits.
- Local circumstances can affect choice of proposed extraction method and refinery process.
- Mining companies need to understand the stakeholder's point of view. Mining companies need to work with stakeholders. Mining companies can't just give them solutions.

<u>Key Messages of the Session</u>

- The definition of sustainability for the mining industry is based on its unique characteristics: 1) it has a heavy footprint and 2) mineral deposits are finite. Based on these characteristics, sustainability for mining companies refers to the need to first ensure that the positive impact of mining operations lasts beyond the life of the mine and second, to ensure that the negative effects are sufficiently addressed during the life of the mine and that no negative impact lasts beyond the mine's life.
- At the pre-exploration and exploration stage, mining companies must be able to identify the following factors: major economic, environmental and social issues; value chain process (i.e. extraction method; refinery process; chemical used); proposed operation plan; footprint; stakeholders; and stakeholder satisfaction metrics.
- It is not unusual for stakeholders to be emotionally invested in their concerns and priorities. The key to a productive exchange is to understand the foundation of the emotional reaction while continuing to develop a rational solution.

REQUIRED MATERIAL

Case: Alarilla, Maria Cristina; APEC Secretariat. (May 2011) "SMI and the Blaans: A Sustainable Development Alliance" in *CSR in Mining for APEC Economies*.

Reading: Herrera, Maria Elena. (2011). "Corporate Social Mining Sector for APEC Economies", *CSR in Mining for APEC Economies*. Asia Pacific Economic Cooperation Secretariat.

RECOMMENDED READING

Australian Government- Department of Resources, Energy and Tourism. (2009). "Working with Indigenous Communities: Leading Practice Sustainable Development Program for the Mining Industry." Accessed at http://www.ret.gov.au/resources/Documents/LPSDP/WorkingIndigenousCommunities.pdf

REFERENCES

RVR Center (2011). "Towards Strategic CSR: Aligning CSR with the Business and Embedding CSR into the Organization (A Manual for Practitioners)"

Alfonso, Felipe B. and James P. Neelankavil. (2009). "CSR and Collaborative Partnerships." AIM Journal of Asian Management: Special Issue on Corporate Social Responsibility. Vol 01 Issue 01, 2009. Makati City: Asian Institute of Management

PREREQUISITES, IF ANY

- A Discussion on the Mining Stages—focusing on the Pre-exploratory and Exploratory Stages
- Bridging Leadership

SPECIAL REQUIREMENTS:

a. **Preparation:** Prepare a slide with the student's study questions
b. **Equipment and supplies required:**
   i. For the Room Set-up: LCD Projector and Screen; Laptop; Mic/lapel; Whiteboard and markers; USB for transferring the presentations; Recorder
   ii. For each can group: Participants must be divided into groups with 5-6 members each. Each Can Group must have manila paper or flip chart, markers, meta cards, masking tape.
c. **Room lay-out:** Class room set-up + can group discussion area
d. **Staff support required:** 1 staff to insert the presentation and to document the event

FIGURES AND FRAMEWORKS

Below are the figures and frameworks that could be used in this session. Please refer to the section on the List of Figures and Frameworks.

- Box 2: Components of Value Chain Analysis
- Table 1: Examples of Stakeholders
- Box 3: Key Questions in Analyzing Stakeholders
- Box 4: Key Messages Pre-exploration and Exploration Stage

Session Brief – For Teachers

MINE VISIT

CSR IN APEC MINING: TRAIN THE TRAINORS PROGRAM

Session Code: 3i-A
Session Title: Site Visit
Session Topic: Site Visit
Session Format: Field Trip

ABSTRACT

The primary objective of the session is to provide the participants an opportunity to visit a mine site.

A mine site typically has the following areas: Ore and Product Stockpiles, Processing Plants, Tailings Storage Facility, Staff Areas and Ore Deposits.

The technical mining process used varies depending on the metals and minerals extracted. Chemicals used by mining companies also differ. An example of technical mining process include: hauling of ores, size reduction of ores, flotation, detoxification, solid/liquid separation, storage and shipment.

Mining companies are also implementing environmental, health and safety (EHS), environmental sustainability as well as social development programs. EHS initiatives are implemented to ensure employee protection in the workplace. Environmental sustainability initiatives are implemented to minimize the impact of mining operations in the ecosystem. Social development programs address the basic needs of the host community.

LEARNING OBJECTIVES

- To provide an understanding of how mining companies operate;
- To provide an opportunity to learn from other mining companies in addressing social, environmental and political issues;

STUDY QUESTIONS AND/OR HOMEWORK ASSIGNMENT

- What are the important factors in running a successful mining operation?
- What problems are encountered? How do they address these concerns?

This session brief was written by Maria Cristina I. Alarilla under the supervision of Assoc. Prof. Maria Elena B. Herrera for the project entitled, "CSR in APEC Mining: Train the Trainers Program" This APEC funded project was implemented by the RVR Center for Corporate Social Responsibility.

CONTENT SUMMARY

The session begins with a discussion of the operations stage. The faculty will introduce the mine site and the resource persons. The speakers will provide a brief overview about their company and its operations. Afterward, the participants will visit the different areas of the mine site. At the end of the session, participants will be given an opportunity to discuss their observations and insights during the site visit.

Activities during the Operations Stage

In the operations stage, mining companies focus on the construction of the mine site and auxiliary infrastructures. Mining companies also hire mining engineers and experts and train the necessary personnel. During the operations stage, mining companies conduct the necessary processes to extract minerals from ores. Metals and minerals are stored and shipped. In addition, mining companies also mitigate the socio-economic and environmental effects of their operations through water quality monitoring, waste water management, protection of human rights, livelihood programs, and wildlife conservation. (See Key Messages in the Mining and Processing Operations)

Mining companies must continuously evaluate and assess their footprint through a value chain analysis. Components of each process in the value chain may include: input and output; by-product; location; environmental impact; stakeholder impact; and opportunities and gaps. (See Components of Value Chain Analysis)

Even if mining companies are already at the operations stage, they can study and adopt new technologies that could help minimize their environmental footprint.

Environmental Impact and Mitigating Measures during the Operations Stage

In the operations stage, environmental impact could be divided into two phases— 1) Development and Construction; and 2) Mining, Minerals processing and Refining.

Infrastructure constructed include access roads and airstrips; construction and accommodation camps; power supply (electricity, gas or diesel); fuel and chemical storage facilities; water supply; process plant; workshops and warehousing; contractor lay down areas; offices, change rooms; crushing plant; tailings storage facilities; waste rock, low-grade and other dumps; and stockpile preparation.[1]

A summary of the environmental impact and mitigating measures during the development and construction of the mine site are provided below. This is an extract from “A Guide to Leading Practice Sustainable Development in Mining.”

- Water quality Issues: Developing water management plan. Preparing EIS: Baseline inventory and monitoring at key sites, including those in reference catchment(s), implemented for water quality and ecological features.
- Airborne Contaminants (due to earthmoving and road construction), Noise and Vibration: Continue baseline monitoring; installation of dust monitoring instrument; implementation of a comprehensive monitoring and audit program (i.e. continuous record of environmental noise emissions); Ventilation fans for underground mining (but may disrupt community lifestyle)

[1] Australian Government- Department of Resources, Energy and Tourism. (July 2011). “A Guide to Leading Practice Sustainable Development in Mining”. Part of the Leading Practice Sustainable development Program for the Mining Industry. Accessed at http://www.ret.gov.au/resources/Documents/LPSDP/guideLPSD.pdf

- Biodiversity Management: effective management of contractors is also an essential aspect of leading practice biodiversity management (i.e. EMS; protection of vegetation and watercourses; control of pests; disruption of wildlife; waste management) [1]

Depending on the type of extraction process, refinery process, chemicals used and metals processed, the environmental impact and mitigation initiatives vary. A summary of the environmental impact during the mining, minerals processing and refining activities are provided below. This is a summary of sections of "A Guide to Leading Practice Sustainable Development in Mining."

1) Water quality issues (i.e. discharge management; possible acid rock drainage; tailings management; solid waste management): On-site monitoring (discharges, storage and holding dams, groundwater) Off-site monitoring of receiving system and reference sites (quality, flows, biology). Water management plan may include: Long and short term water balance models; The long term water balance model; Tailings Flocculation; Integration of the operational water supply system within the regional supply system; Re-injection into watercourses.
2) Airborne contaminants, noise and vibrations: Blast modeling to assess blast overpressure levels
3) Biodiversity management (terrestrial and aquatic ecosystem): Managing impacts on terrestrial vegetation and fauna (by identifying values from survey information and then develop environmental management plans); introduction of innovative and sustainable land management practices; identifying the link between the quality of terrestrial ecosystem management and the receiving aquatic ecosystem; use of water quality risk management framework for management of biodiversity in aquatic ecosystems; management and monitoring of process reagents, solid and liquid wastes, hydrocarbons, degreasers and sewage effluents;
4) Hazardous Substances Depending on the substance present, mining companies could manage acid and metalliferous drainage. Mining companies could also adopt the international cyanide management code; implement adequate ventilation and monitoring; and conduct proper and safe disposal.
5) Acid Mine Drainage: AMD Management Plan
6) Tailings Management: Use of Robinsky or Central Thickened Discharge method of tailings disposal; reduce tailings production, and then to recycle and reuse the tailings where possible. Possible use of tailings: (1) the finer portions of fly ash used as a pozzolanic in the manufacture of cements; (2) power station bottom ash used as inert building fill; (3) red mud from the alumina industry used as a soil conditioner and to clean polluted water streams; (4) power station ash used to fill coal mining voids; and (5) coal tailings used as a low grade fuel[2]

Social impact during the Operations Stage

During the operations stage, key concerns of stakeholders are

[1] Australian Government- Department of Resources, Energy and Tourism. (July 2011). "A Guide to Leading Practice Sustainable Development in Mining". Part of the Leading Practice Sustainable development Program for the Mining Industry. Accessed at http://www.ret.gov.au/resources/Documents/LPSDP/guideLPSD.pdf

[2] Australian Government- Department of Resources, Energy and Tourism. (July 2011). "A Guide to Leading Practice Sustainable Development in Mining". Part of the Leading Practice Sustainable development Program for the Mining Industry. Accessed at http://www.ret.gov.au/resources/Documents/LPSDP/guideLPSD.pdf

Primary Internal Stakeholders

Employees: High wage; Comfortable workplace environment; Health and Safety; and future employment opportunities

Investors: Cost of operations; Prices of minerals; Efficiency in extracting minerals; Safety and standards (quality control)

Primary External Stakeholders

Suppliers (i.e. Construction Equipment, Manpower Services, Foodstuff): On-time payment; adherence to code of conduct; meet expectations of mining company

Consumers: Ethical production process and adherence to labor laws (i.e. child labor)

Secondary Stakeholders

Direct Impact Community: Information Campaign; Social investments; Employment; SLTO; Profit Sharing; Social Ills; and Boom town effect

Environment: Pollution generated by mineral processing, treatment, storage and transportation

Indigenous People: Protection of culture; Employment; Community programs; Livelihood; Environmental Protection; SLTO

Moderating or Mediating Stakeholders

Critical Stakeholders (Media, NGO, Socio-civic Orgs, Church): Information Dissemination; Environmental Protection, Protection of Human Rights and IPs; Social Ills

Government: Compliance to Local Laws (i.e. Environmental; Employment; Mining Laws); Payment of Taxes

Security Threats: Land agreement passage; payment of revolutionary taxes; kidnapping of mine employees; extortion; arson; destruction of mine facilitates and equipment.

The overview of the mining company and its operations will include: profile of the mining company; site map and location; technical activities; social and environmental initiatives; and key accomplishments and awards.

A suggested site visit plan should include the following: 1) Extraction Site; 2) Processing Plant; 3) Tailings Management Facility; and 4) Staff Area. If there is time, the host community and environmental sustainability sites could also be visited.

SESSION SEQUENCE PLAN

The session is scheduled for 3 hours. Time allocation may vary depending on the travel time to and from the mine site; and if other activities are scheduled for the morning session.

The session will have four blocks: 1) Overview of the Operation Stage; 2) Company Overview; 3) Mine Visit; and 4) Integration.

1) Overview of the Operations Stage: The objective is for the participants to revisit the key activities of mining companies during the operation stage.
2) Company Overview: The objective is for the participants to understand how the mine operates. The company briefing may include the safety induction, environmental protection initiatives, technical mining operations, and social development programs.
3) Mine Visit: The objective is for the participants to visit the various areas of the mine site. The participants should visit the extraction site, processing plant, tailings

management facility, staff area, host community and environmental sustainability sites.

4) Integration and Wrap up: The objective is for the participants to clarify any concerns that they experienced or observed during the mine visit. This is also a good opportunity for the host company to share the key lessons learned during their operations.

KEY MESSAGES

- The definition of sustainability for the mining industry is based on its unique characteristics: 1) it has a heavy footprint and 2) mineral deposits are finite. Based on these characteristics, sustainability for mining companies refers to the need to first ensure that the positive effects of mining operations last beyond the life of the mine and second, to ensure that the negative effects of mining operations are sufficiently addressed during the life of the mine and that no negative effect lasts beyond the mine's life.
- At the operations stage, mining companies start to earn a profit. This is also the stage where their environmental and social impact is high; and government income is large.
- Ensuring that some of these funds are dedicated towards preparing for rehabilitation and eventual decommissioning is essential.
- Mining companies need to study and adopt new mining technologies. New mining technologies may help lower environmental impact of their operations.
- The exit strategy is a "living" document which must be revisited and improved continuously based on the current development of the mine.
- Stakeholder's concerns are addressed through environmental and social initiatives of the company.
- During the operations stage, mining companies could implement progressive rehabilitation of mined areas.

RECOMMENDED READINGS

Australian Government- Department of Resources, Energy and Tourism. (2009). "Airborne Contaminants, Noise and Vibration: Leading Practice Sustainable Development Program for the Mining Industry." Accessed at http://www.ret.gov.au/resources/Documents/LPSDP/AirborneContaminantsNoiseVibrationHandbook_web.pdf

REFERENCES

Australian Government- Department of Resources, Energy and Tourism. (July 2011). "A Guide to Leading Practice Sustainable Development in Mining". Part of the Leading Practice Sustainable development Program for the Mining Industry. Accessed at http://www.ret.gov.au/resources/Documents/LPSDP/guideLPSD.pdf

SPECIAL REQUIREMENTS

a. Preparation: Logistics (Transportation, meals and accommodation- if necessary)
b. Equipment and supplies required:
   For the Room Set-up: LCD Projector and Screen; Laptop; Mic/lapel; Whiteboard and markers; USB for transferring the presentations; Recorder
c. Room lay-out: Seminar/Lecture/Plenary set-up
d. Staff support required: Transfer of the ppt to the laptop and documentation of the event.

FIGURES AND FRAMEWORKS

Below are the figures and frameworks that could be used in this session. Please refer to the section on the List of Figures and Frameworks.

- Box 2: Components of Value Chain Analysis
- Box 5: Key Messages in the Construction and Development Phase
- Box 6: Key Messages in the Mining and Processing Operations

Session Brief – For Teachers

OPERATIONS: LECTURE

CSR IN APEC MINING: TRAIN THE TRAINERS PROGRAM

Session Code **3ii-A**
Session Title Operations
Session Topic Operations
Session Format Lecture Discussion

ABSTRACT

The primary objective of the session is to provide a brief overview of the operations stage of the mine life cycle. The session will begin with the presentation on the mining activities during the operations stage. The session will also present the issues and concerns of mining companies as well as the needs and concerns of mining stakeholders.

The operations stage lasts for 10 to 30 years depending on the volume of mineral deposits. During the operations stage, mining companies are focused on the technical aspect of processing the ores. Activities may include extraction of ore, separation of minerals, disposal of waste and shipment of processed metals and minerals. Mining companies also start to earn profits and distribute royalties to the government and local communities.

Mining companies also need to ensure that their operations are compliant with environmental regulations. Mining companies need to maintain a social license to operate.

LEARNING OBJECTIVES

- To provide an understanding of the issues faced by mining companies during the operations stage;
- To provide an understanding of the needs and concerns of stakeholders during the operations stage.

STUDY QUESTIONS AND/OR HOMEWORK ASSIGNMENT

- What are the important factors in running a successful mining operation?
- What problems are encountered? How do they address these concerns?
- How will the company move forward?

CONTENT SUMMARY

The session begins with a presentation on the key activities completed by mining companies at the operations stage. The session presents the issues faced during the operations stage. The discussion ends with a presentation of stakeholder concerns.

This session brief was written by Maria Cristina I. Alarilla under the supervision of Assoc. Prof. Maria Elena B. Herrera for the project entitled, "CSR in APEC Mining: Train the Trainers Program" This APEC funded project was implemented by the RVR Center for Corporate Social Responsibility.

Activities during the Operations Stage

In the operations stage, mining companies focus on the construction of the mine site and auxiliary infrastructure. Mining companies also hire engineers and experts and train of the necessary personnel. During the operations stage, mining companies conduct the necessary processes to extract minerals from ores. Metals and minerals are stored and shipped. In addition, mining companies also mitigate their socio-economic and environmental effects through water quality monitoring, waste water management, protection of human rights, livelihood programs, and wildlife conservation.

Mining companies must continuously evaluate and assess their footprint through a value chain analysis. Components of each process in the value chain may include: input and output; by-product; location; environmental impact; stakeholder impact; and opportunities and gaps. (See Components of Value Chain Analysis)

Even if mining companies are already at the operations stage, they can study and adopt new technologies that could help minimize their environmental footprint.

Environmental Impact and Mitigating Measures during the Operations Stage

In the operations stage, environmental impact can be divided into two phases—1) Development and Construction; and 2) Mining, Minerals processing and Refining.

Infrastructure constructed include access roads and airstrips; construction and accommodation camps; power supply (electricity, gas or diesel); fuel and chemical storage facilities; water supply; process plant; workshops and warehousing; contractor lay down areas; offices, change rooms; crushing plant; tailings storage facilities; waste rock, low-grade and other dumps; and stockpile preparation.[1]

A summary of the environmental impact and mitigating measures during the development and construction of the mine site are provided below. This is an extract from "A Guide to Leading Practice Sustainable Development in Mining."

- Water quality Issues: Developing water management plan. Preparing EIS: Baseline inventory and monitoring at key sites, including those in reference catchment(s), implemented for water quality and ecological features.
- Airborne Contaminants (due to earthmoving and road construction), Noise and Vibration: Continue baseline monitoring; installation of dust monitoring instrument; implementation of a comprehensive monitoring and audit program (i.e. continuous record of environmental noise emissions); Ventilation fans for underground mining (but may disrupt community lifestyle)
- Biodiversity Management: effective management of contractors is also an essential aspect of leading practice biodiversity management (i.e. EMS; protection of vegetation and watercourses; control of pests; disruption of wildlife; waste management) [2]

[1] Australian Government- Department of Resources, Energy and Tourism. (July 2011). "A Guide to Leading Practice Sustainable Development in Mining". Part of the Leading Practice Sustainable development Program for the Mining Industry. Accessed at http://www.ret.gov.au/resources/Documents/LPSDP/guideLPSD.pdf

[2] Australian Government- Department of Resources, Energy and Tourism. (July 2011). "A Guide to Leading Practice Sustainable Development in Mining". Part of the Leading Practice Sustainable development Program for the Mining Industry. Accessed at http://www.ret.gov.au/resources/Documents/LPSDP/guideLPSD.pdf

Depending on the type of extraction process, refinery process, chemicals used and metals processed, the environmental impact and mitigation initiatives vary. A summary of the environmental impact during the mining, minerals processing and refining activities are provided below. This is an extract from "A Guide to Leading Practice Sustainable Development in Mining."

- Water quality issues (i.e. discharge management; possible acid rock drainage; tailings management; solid waste management): On-site monitoring (discharges, storage and holding dams, groundwater) Off-site monitoring of receiving system and reference sites (quality, flows, biology). Water management plan may include: Long and short term water balance models; The long term water balance model; Tailings Flocculation; Integration of the operational water supply system within the regional supply system; Re-injection into watercourses.
- Airborne contaminants, noise and vibrations: Blast modeling to assess blast overpressure levels
- Biodiversity management (terrestrial and aquatic ecosystem): Managing impacts on terrestrial vegetation and fauna (by identifying values from survey information and then develop environmental management plans); introduction of innovative and sustainable land management practices; identifying the link between the quality of terrestrial ecosystem management and the receiving aquatic ecosystem; use of water quality risk management framework for management of biodiversity in aquatic ecosystems; management and monitoring of process reagents, solid and liquid wastes, hydrocarbons, degreasers and sewage effluents;
- Hazardous Substances Depending on the substance present, mining companies could manage acid and metalliferous drainage. Mining companies could also adopt the international cyanide management code; implement adequate ventilation and monitoring; and conduct proper and safe disposal.
- Acid Mine Drainage: AMD Management Plan
- Tailings Management: Use of Robinsky or Central Thickened Discharge method of tailings disposal; reduce tailings production, and then to recycle and reuse the tailings where possible. Possible use of tailings: (1) the finer portions of fly ash used as a pozzolanic in the manufacture of cements; (2) power station bottom ash used as inert building fill; (3) red mud from the alumina industry used as a soil conditioner and to clean polluted water streams; (4) power station ash used to fill coal mining voids; and (5) coal tailings used as a low grade fuel[1]

Social impact during the Operations Stage

Stakeholder concerns vary depending on the mine stage. Social and environmental issues may include the continuing need for a social license to operate, transparent and accountable use of royalties, employment of the host community, and environmental degradation.

Mining companies also need to comply with government regulations in terms of environmental, labor, safety, and social development guidelines. Mining companies conduct monitoring and evaluation initiatives, which measure their contribution and impact on the environment and the community.

During the operations stage, key concerns of stakeholders are:

[1]Australian Government- Department of Resources, Energy and Tourism. (July 2011). "A Guide to Leading Practice Sustainable Development in Mining". Part of the Leading Practice Sustainable development Program for the Mining Industry. Accessed at http://www.ret.gov.au/resources/Documents/LPSDP/guideLPSD.pdf

Primary Internal Stakeholders	Employees: High wage; Comfortable workplace environment; Health and Safety; and future employment opportunities Investors: Cost of operations; Prices of minerals; Efficiency in extracting minerals; Safety and standards (quality control)
Primary External Stakeholders	Suppliers (i.e. Construction Equipment, Manpower Services, Foodstuff): On-time payment; adherence to code of conduct; meet expectations of mining company Consumers: Ethical production process and adherence to labor laws (i.e. child labor)
Secondary Stakeholders	Direct Impact Community: Information Campaign; Social investments; Employment; SLTO; Profit Sharing; Social Ills; and Boom town effect Environment: Pollution generated by mineral processing, treatment, storage and transportation Indigenous People: Protection of culture; Employment; Community programs; Livelihood; Environmental Protection; SLTO
Moderating or Mediating Stakeholders	Critical Stakeholders (Media, NGO, Socio-civic Orgs, Church): Information Dissemination; Environmental Protection, Protection of Human Rights and IPs; Social Ills Government: Compliance to Local Laws (i.e. Environmental; Employment; Mining Laws); Payment of Taxes Security Threats: Land agreement passage; payment of revolutionary taxes; kidnapping of mine employees; extortion; arson; destruction of mine facilitates and equipment.

During the operations stage, mining companies earn profits. Government and community also receive higher royalty payments. The environmental and social impact of their operations is high compared to other mine stages. The challenge is how the mining company would be able to mitigate its environmental and social impact and amplify its financial contribution to the government and local community.

Local government and host communities (land owners) may not have the skills to properly use the royalties from mining companies. There is a need to increase the skills and competencies of these stakeholders on how to effectively use the fund in to generate sustainable income for all.

Mining companies need to balance the interests of the shareholders and stakeholders. At the operation or extraction stage, mineral or metal prices are critical for the on-going operation of the mine. When the price is low, there is a huge probability that the mine will temporarily close, which results in work stoppage.

Session Sequence Plan

The session is only scheduled for 70 mins. The session will have three session blocks: 1) Overview of the Operation Stage; 2) Assessment: Footprint and Stakeholder; 3) Sustainable Initiatives.

1) Overview of the Operation Stage: The objective is for the participants to revisit the key activities of mining companies during the operations stage.
2) Assessment: Footprint and Stakeholder: The objective is for the participants to understand the impact of mining on the environment and stakeholders. The session will start with a presentation on the environmental impact and list of potential stakeholders affected by mining operations.
3) Sustainable Initiatives: The objective is for the participants to recognize potential sustainable initiatives (for the environment and stakeholders) that mining companies can implement during the operation stage.

KEY MESSAGES

- The definition of sustainability for the mining industry is based on its unique characteristics: 1) it has a heavy footprint and 2) mineral deposits are finite. Based on these characteristics, sustainability for mining companies refers to the need to first ensure that the positive impact of mining operations lasts beyond the life of the mine and second, to ensure that the negative effects of mining operations are sufficiently addressed during the life of the mine and that no negative impact lasts beyond the life of the mine.
- At the operations stage, mining companies start to earn a profit. This is also the stage where its environmental and social impact is high; and government income is large.
- Ensuring that some of these funds are dedicated towards preparing for rehabilitation and eventual decommissioning is essential.
- Mining companies need to study and adopt new mining technologies. New mining technologies may help lower environmental impact of their operations.
- The exit strategy is a "living" document which must be revisited and improved continuously based on the current development of the mine.
- Stakeholder's concerns are addressed through environmental and social initiatives of the company.
- During the operations stage, mining companies could implement progressive rehabilitation of mined areas.

REQUIRED MATERIAL

Herrera, Maria Elena. (2011). "Corporate Social Mining Sector for APEC Economies", CSR in Mining for APEC Economies. Asia Pacific Economic Cooperation Secretariat.

REFERENCES

Australian Government- Department of Resources, Energy and Tourism. (July 2011). "A Guide to Leading Practice Sustainable Development in Mining". Part of the Leading Practice Sustainable development Program for the Mining Industry. Accessed at http://www.ret.gov.au/resources/Documents/LPSDP/guideLPSD.pdf

SPECIAL REQUIREMENTS

a. Preparation:
b. Equipment and supplies required:
   For the Room Set-up: LCD Projector and Screen; Laptop; Mic/lapel; Whiteboard and markers; USB for transferring the presentations; Recorder
c. Room lay-out: Classroom style
d. Staff support required: Transfer of the ppt to the laptop and documentation of the event.

FIGURES AND FRAMEWORKS

Below are the figures and frameworks that could be used in this session. Please refer to the section on the List of Figures and Frameworks.

- Box 2: Components of Value Chain Analysis
- Box 5: Key Messages in the Construction and Development Phase
- Box 6: Key Messages in the Mining and Processing Operations

Session Brief – For Teachers

DECOMMISSIONING AND REHABILITATION

CSR IN APEC MINING: TRAIN THE TRAINERS PROGRAM

Session Code: 3ii-B
Session Title: Decommissioning and Rehabilitation
Session Topic: Decommissioning and Rehabilitation
Session Format: Lecture Discussion

ABSTRACT

The primary objective of the session is to provide a brief overview of the closure and rehabilitation stage of the mine life cycle. The session will begin with the presentation on the mining activities during the closure and rehabilitation stage. The session will also present guidelines in developing an exit strategy.

The closure and rehabilitation stage lasts for 1 to 10 years depending on the extent of its operations. Mine site closure involves decommissioning (dismantling the infrastructure); reclamation (restoring the disturbed areas); and care and maintenance (monitoring of reclamation works and treatment of tailings).

The objective of the closure and rehabilitation stage is to protect the public's health and safety, minimize the environmental effects, remove the hazardous materials, preserve water quality, stabilize land surface area, and establish new landforms for vegetation.[1]

LEARNING OBJECTIVES

- To provide an understanding of the importance of a rehabilitation strategy
- To learn how to develop and implement an exit strategy.

STUDY QUESTIONS AND/OR HOMEWORK ASSIGNMENT

- What are the key components of a rehabilitation strategy?
- What impression do you want your company to be remembered by?
- What are the environmental and social effects that must be addressed during the rehabilitation phase?
- How will the mining company address the long-term or permanent impact of the mining operation?

This session brief was written by Maria Cristina I. Alarilla under the supervision of Assoc. Prof. Maria Elena B. Herrera for the project entitled, "CSR in APEC Mining: Train the Trainers Program" This APEC funded project was implemented by the RVR Center for Corporate Social Responsibility.

[1] Toovey, Leia. (October 2011). "The Life Cycle of a Gold Mine: Rehabilitation." Accessed from (July 2012).

CONTENT SUMMARY

The session begins with a presentation on the key activities of mining companies at the closure and rehabilitation stage. The session presents the issues faced during the closure and operation. The discussion ends with the presentation of sustainability initiatives (i.e. environment and community) related to the maintenance and monitoring of the mine site.

Activities during the Closure and Rehabilitation Stage

The primary reason mining companies stop operations is the depletion of reserves. A list of reasons for closing a mine site is provided below. This is an extract from "A Guide to Leading Practice Sustainable Development in Mining." [1]

- economic, such as low commodity prices or high costs that may lead a company into voluntary administration or receivership;
- geological, such as an unanticipated decrease in grade or size of the ore body;
- technical, such as adverse geotechnical conditions or mechanical/equipment failure;
- regulatory, due to safety or environmental breaches;
- policy changes, which occur from time-to-time, particularly when governments change;
- social or community pressures, particularly from non-government organizations;
- closure of downstream industry or markets; and
- flooding or inrush.

During the closure and rehabilitation phase, mining companies need to "implement the closure plans developed in the earlier stages of the mining cycle; conduct investigations and studies to identify potential contamination, and confirm that the agreed outcomes and criteria have been met."[2]

Below are the activities at the closure and rehabilitation phase. This is an extract from "A Guide to Leading Practice Sustainable Development in Mining."

- demolition and removal of infrastructure;
- reshaping of remaining mining landforms;
- completing the rehabilitation and remediation processes;
- monitoring and measuring the performance of closure activities against the agreed standards and criteria;
- inspections, consultation and reporting to stakeholders on progress; and
- progressive community and government sign off. [3]

Closure and rehabilitation is important not only for the company's reputation and image but also for the benefit of the host community.

> Rehabilitation is important because a poorly executed rehabilitation program can hurt the share value of a public company. Companies that do not follow proper rehabilitation plans could face costly lawsuits. Furthermore, poorly rehabilitated mines leave a negative legacy for their operators. As permission to develop future mines becomes tied to a company's reputation, a company with a history of not

[1] Australian Government- Department of Resources, Energy and Tourism. (July 2011). "A Guide to Leading Practice Sustainable Development in Mining". Part of the Leading Practice Sustainable development Program for the Mining Industry. Accessed at http://www.ret.gov.au/resources/Documents/LPSDP/guideLPSD.pdf

[2] Ibid.

[3] Ibid.

following proper rehabilitation procedure may have difficulty obtaining this permission in the future.[1]

During the closure and post mining stage, "the key people on site will be (ideally) the closure manager and the closure team, including the planner who created the master plan, sequencing all of the activities, tasks and resources required." The mining company also needs to follow the rehabilitation plan. "By continually reviewing the plan, and rescheduling activities and resources, the deadlines can be met and, more importantly, costs controlled. This will ensure the closure tasks can be completed on time and within budget."[2]

Developing an Exit Strategy: Environment

At this stage, the environment is the top priority. Mining companies need to ensure that the site does not cause further damage to the environment. The land must be environmentally sustainable.

Mitigating measures that address the environmental footprint could be divided into two—1) rehabilitation phase and 2) closure and post-mining phase.

Components of a rehabilitation strategy are: 1) developing designs for appropriate landforms for the mine site; 2) creating landforms that will behave and evolve in a predictable manner, according to the design principles established; 3) establishing appropriate sustainable ecosystems.

Some of the mitigating measures during the rehabilitation phase are presented below. This is an extract from "A Guide to Leading Practice Sustainable Development in Mining."

- Water quality issues: Management of onsite water: On-going assessment of impacts.
- Biodiversity: Revegetation to re-establish the majority of target vegetation consistent with the seven natural vegetation communities that occurred in the area disturbed;
- Managing the risk of AMD at Closure: AMD modeling and long-term monitoring; use of water covers.[3]

Some of the mitigation measures during the closure and post-mining phase are presented below. A list of reasons for closing a mine site is provided below. This is an extract from "A Guide to Leading Practice Sustainable Development in Mining."

- Water quality issues: considering all possible future impacts (e.g. acid rock drainage); continued off-site and onsite monitoring.
- Final Rehabilitation: Land form construction; top soil treatments[4]

Some of the possible strategies for mine tailings rehabilitation and closure are presented below. This is an extract from "A Guide to Leading Practice Sustainable Development in Mining."[5]

[1] Toovey, Leia. (October 2011). "The Life Cycle of a Gold Mine: Rehabilitation." Accessed from (July 2012).
[2] Australian Government- Department of Resources, Energy and Tourism. (July 2011). "A Guide to Leading Practice Sustainable Development in Mining". Part of the Leading Practice Sustainable development Program for the Mining Industry. Accessed at http://www.ret.gov.au/resources/Documents/LPSDP/guideLPSD.pdf
[3] Ibid.
[4] Ibid.
[5] Ibid.

- direct vegetation of the tailings;
- a thin layer of gravel placed directly over the tailings surface for dust mitigation;
- a vegetated, mono-layer cover, aimed at shedding rainfall runoff in a humid climate;
- a vegetated, non-shedding store/release soil cover, aimed at minimizing percolation through it by the release of stored seasonal rainfall by evapo-transpiration during the dry season;
- a capillary break layer, overlain by a non-shedding, vegetated growth medium, aimed at controlling the uptake of salts into the growth medium to sustain vegetation, for application in a dry climate.

Developing an Exit Strategy: Community

In developing an exit strategy, mining companies need to take into consideration how to create a sustainable livelihood program for the community and how to help the government maximize the economic impact from taxes and royalties. When the mine closes, there is a huge probability that host communities would turn into ghost towns or there will be a boom and bust cycle. Mining companies need to ensure that this does not happen.

The challenge for mining companies is to find an alternative use of the land that creates economic livelihood for the community even after the mine closes. The land must be economically viable.

During the closure and rehabilitation stage, key concerns of stakeholders are:

Primary Internal Stakeholders	Employees: Future employment opportunities Investors: Cost of reclamation and rehabilitation; Profits from the mining operation
Primary External Stakeholders	Suppliers (i.e. Construction Equipment, Manpower Services, Foodstuff): On-time payment; adherence to code of conduct; meet expectations of mining company Consumers: Ethical production process and adherence to labor laws (i.e. child labor)
Secondary Stakeholders	Direct Impact Community: Continued Livelihood; Rehabilitation of the Mine Site (i.e. impacted areas); Boom town effect Environment: Restoring of the ecosystem Indigenous People: Continued livelihood; restoring of ancestral domain (if possible)
Moderating or Mediating Stakeholders	Critical Stakeholders (Media, NGO, Socio-civic Orgs, Church): Information Dissemination; Environmental Protection, Protection of Human Rights and IPs; Social Ills Government: Compliance to Local Laws (i.e. Environmental; Employment; Mining Laws); Payment of Taxes Security Threats: Land agreement passage; payment of revolutionary taxes; kidnapping of mine employees; extortion; arson; destruction of mine facilitates and equipment.

SESSION SEQUENCE PLAN

The session is only scheduled for 20 minutess. The session will cover two sections: (1) Overview of the Closure and Rehabilitation Stage and (2) Developing a Sustainable Rehabilitation Strategy.

- Overview of the Rehabilitation and Decommissioning Stage: The objective is for the participants to revisit the key activities of mining companies during the closure and rehabilitation stage.
- Developing a Sustainable Rehabilitation Strategy: The objective is for the participants to recognize the importance of developing a rehabilitation strategy.

KEY MESSAGES

The definition of sustainability for the mining industry is based on its unique characteristics: 1) it has a heavy footprint and 2) mineral deposits are finite. Based on these characteristics, sustainability for mining companies refers to the need to first ensure that the positive impact of mining operations lasts beyond the life of the mine and second, to ensure that the negative effects of mining operations are sufficiently addressed during the life of the mine and that no negative impact lasts beyond the life of the mine.

- The environmental rehabilitation program typically follows the plan for land use after decommissioning. This plan must be realistic and practical. It must be acceptable to both the local government and local community.
- At this stage, it is important that alternative sources of income for the community are clearly established.

Throughout the mining stages, companies need to continuously work on the rehabilitation and closure strategy developed at the pre-exploratory and exploration stage. In case of unexpected closure, the exit strategy guides the company on how to mitigate its environmental and social effects.

REQUIRED MATERIAL

Herrera, Maria Elena. (2011). “Corporate Social Mining Sector for APEC Economies”, *CSR in Mining for APEC Economies*. Asia Pacific Economic Cooperation Secretariat.

REFERENCES

Toovey, Leia. (October 2011). “The Life Cycle of a Gold Mine: Rehabilitation.” Accessed from http://goldinvestingnews.com/19051/the-life-cycle-of-a-gold-mine-rehabilitation.html (July 2012).

Department of Industry Tourism and Resources, Government of Australia. (2006) “Mine Rehabilitation: Leading Practice Sustainable Development Program for the Mining Industry.” Accessed from http://www.dmp.wa.gov.au/documents/mine_rehab.pdf (July 2012)

Department of Industry Tourism and Resources, Government of Australia. (2006) “Mine Rehabilitation: Leading Practice Sustainable Development Program for the Mining Industry.” Accessed from http://www.dmp.wa.gov.au/documents/mine_rehab.pdf (July 2012)

Australian Government- Department of Resources, Energy and Tourism. (July 2011). “A Guide to Leading Practice Sustainable Development in Mining”. Part of the Leading Practice Sustainable development Program for the Mining Industry. Accessed at http://www.ret.gov.au/resources/Documents/LPSDP/guideLPSD.pdf

RECOMMENDED READINGS

Department of Industry Tourism and Resources, Government of Australia. (2006) “Mine Rehabilitation: Leading Practice Sustainable Development Program for the Mining Industry.”

Accessed from http://www.ret.gov.au/resources/Documents/LPSDP/LPSDP-MineRehabilitationHandbook.pdf

Department of Industry Tourism and Resources, Government of Australia. (2006) "Mine Closure and Completion: Leading Practice Sustainable Development Program for the Mining Industry." Accessed from http://www.ret.gov.au/resources/Documents/LPSDP/LPSDP-MineClosureCompletionHandbook.pdf

SPECIAL REQUIREMENTS

a. Preparation:
b. Equipment and supplies required:
   For the Room Set-up: LCD Projector and Screen; Laptop; Mic/lapel; Whiteboard and markers; USB for transferring the presentations; Recorder
c. Room lay-out: Classroom style
d. Staff support required: Transfer of the ppt to the laptop and documentation of the event.

FIGURES AND FRAMEWORKS

Below is a framework that could be used in this session. Please refer to the section on the List of Figures and Frameworks.

- Box 7: Key Messages in the Closure and Rehabilitation Phase

Session Brief – For Teachers

REBUILDING TRUST: THE RAPU RAPU EXPERIENCE

CSR IN APEC MINING: TRAIN THE TRAINERS PROGRAM

Session Code: 3ii-C
Session Title: Decommissioning and Rehabilitation
Session Topic: Rebuilding Trust: The Rapu-Rapu Experience
Session Format: Case Discussion
Special Preparations:

- For Lecture and Case Discussion: Please refer to the Special Requirements Section.
- Materials to be distributed beforehand: Rapu Rapu Teaching Case

ABSTRACT

The main objective of the session is to understand how to implement a rehabilitation plan as well as the key activities of mining companies during the closure and rehabilitation stage.

The Rapu Rapu case discusses the importance of social acceptance for mining companies during the mining operations. It also provides an opportunity to think about the development and implementation of an exit strategy that takes into account environmental protection as well as creating sustainable livelihood programs for the community.

The case will present the experience of a company that has struggled to gain social acceptance due to the legacy issues and environmental problems caused by the previous owners. Recently, the company has announced that it would close the mine site in a few years.

Discussion covers the importance of securing both regulatory and social licenses to operate. Discussion will also focus on developing a sustainable exit strategy. An exit strategy must not only address environmental measures to protect the integrity of the project mine area (including the tailings pond, waste dam, open pit), but also ensure continuous livelihood for the host community after operations end.

The case, Rebuilding Trust: The Rapu-Rapu Experience, presents the social initiatives of Rapu Rapu to gain SLTO. In 2005, two tailings spill occurred in the mine site which resulted to the temporary closure of the mine. This case will present the environmental and community programs implemented by the new management in its effort to regain the support of the community; and plan for mine closure.

This session brief was written by Maria Cristina I. Alarilla under the supervision of Assoc. Prof. Maria Elena B. Herrera for the project entitled, "CSR in APEC Mining: Train the Trainers Program" This APEC funded project was implemented by the RVR Center for Corporate Social Responsibility.

LEARNING OBJECTIVES

- To provide an understanding of the role of sustainable development during closure
- To discuss the objectives, strategies and activities during decommissioning and closure.

STUDY QUESTIONS AND/OR HOMEWORK ASSIGNMENT

- How important is sustainable development in preparation for the mine closure?
- What is the objective of mining companies during the closure?
- What preparations must be made to ensure that sustainability targets are met before the mine closes?
- Are there other activities that mining companies need to consider post-operations?

CASE CONTENT

Mine closure is the last stage of the mine life cycle. The mine site will be closed. The challenge for mining companies is to ensure that the positive impact continues and negative effects are eliminated.

Environmental Issues

- The post-mined landscape is safe and is stable from physical, geochemical and ecological perspectives.
- The quality of the surrounding water resources is protected.The agreed sustainable post-mining land use is established and clearly defined to the satisfaction of the community and government.
- Success criteria are agreed with relevant stakeholders, monitored and reported to stakeholders.

Socio-economic Issues

- To minimize the adverse effects of mining on neighbouring communities, and also raises the issue of how to maintain or improve the wellbeing and social sustainability of affected communities
- Community development is centrally concerned with increasing the strength and effectiveness of communities in determining and managing their own futures
- Community development should be driven by the needs of the community, not the company and should seek to contribute to the long-term strengthening of community viability
- Mining companies are extending their commitment to local economic development and capacity building by requiring that contractors also target their training and employment opportunities to the local community, and by giving preference to a local supply chain
- Mining companies are also seeking to provide appropriate skills-transfer and employment opportunities through the development of local business enterprises.

According to the Mine Closure and Completion Handbook, “the overall objective of mine completion is to prevent or minimize adverse long-term environmental, physical, social and economic impacts, and to create a stable landform suitable for some agreed subsequent land use.”[1]

[1]Australian Government- Department of Resources, Energy and Tourism. (October 2006). “Mine Closure and Completion”. Part of the Leading Practice Sustainable development Program for the Mining Industry. Accessed at http://www.ret.gov.au/resources/Documents/LPSDP/LPSDP-MineClosureCompletionHandbook.pdf

Sustainable development issues for closure are provided below. This is an extract from "Mine Closure and Completion."

A list of objectives of mining companies during the closure stage is provided below. This is an extract from "Mine Closure and Completion."

- Enable all stakeholders to have their interests considered during the mine closure process
- Ensure the process of closure occurs in an orderly, cost-effective and timely manner
- Ensure the cost of closure is adequately represented in company accounts and that the community is not left with a liability
- Ensure there is clear accountability and adequate resources for the implementation of the closure plan
- Establish a set of indicators which will demonstrate the successful completion of the closure process
- Reach a point where the company has met agreed completion criteria to the satisfaction of the responsible authority.

At the closure stage, mining companies need to develop a closure strategy that takes into consideration the context of its mining operations. In developing the closure strategy, two factors must be considered:[1]

- Company policy based on "closure process, stakeholder engagement, environmental minimization of risk, meeting regulatory requirements, social and community aspirations, and continuous improvement"
- Performance objectives, criteria and indicators based on a specific set of indicators related to the environment, social, socio-economic and legal consideratons.

Closure framework includes "rehabilitation principles and objectives, including final land use; decommissioning requirements; community objectives and criteria; consent criteria; standards and issues related to whole-of-life considerations; financial costing and provisioning; legal requirements; environmental and social management requirements; and safety considerations."[2]

Risk management is a key component in developing a sustainable mine closure strategy and mine completion. (See Approach to the use of risk management in closure planning)

In the course of the mining stages, mining companies need to take into consideration two factors: 1) sustainable development principles and 2) closure and planning implementation. Only when these two factors are effectively integrated will the company be able to successfully complete the mining project. (See Mine stages)

A summary of the planning activities that mining companies must look into during the operational phase is provided below. This is an extract from "Mine Closure and Completion."

[1]Australian Government- Department of Resources, Energy and Tourism. (October 2006). "Mine Closure and Completion". Part of the Leading Practice Sustainable development Program for the Mining Industry. Accessed at http://www.ret.gov.au/resources/Documents/LPSDP/LPSDP-MineClosureCompletionHandbook.pdf

[2]Australian Government- Department of Resources, Energy and Tourism. (October 2006). "Mine Closure and Completion". Part of the Leading Practice Sustainable development Program for the Mining Industry. Accessed at http://www.ret.gov.au/resources/Documents/LPSDP/LPSDP-MineClosureCompletionHandbook.pdf

- Operations commissioning stage: Baseline data; Characterization and selective placement of materials; Education and Training; Health and Safety; Financial assurance
- Mature operations stage: Mine planning design – developing the mine closure plan; domain requirements; establishment of a closure committee; closure options—need for research and trials; progressive rehabilitation; monitoring standards and performance ; review of closure strategies and plans; and Annual review of closure plan
- Pre-closure planning stage: Finalize closure plan; Minimize the potential environmental liability; Value the assets and plan for the asset sale/transfer process; Developing a deconstruction plan; Developing a human resources plan; Closure the mine and implement the plans.

At the mine completion, mining companies need to show: (1) replacement of the mineral resource asset with sustainable benefits to the community; and (2) attainment of completion criteria to stakeholders' satisfaction, including government.[1]

SESSION SEQUENCE PLAN

The session will have three discussion blocks: 1) Foundation setting; 2) Case Discussion and 3) Synthesis.

1) *Foundation Setting:* The objective of the session block is to clarify the case facts. This should include discussion on: the importance of the RRPP to the Philippine Mining Industry and to the Rapu Rapu municipality; critical stakeholders that support and oppose the mining operation; the environmental and social initiatives of RRPP; and the current challenge of RRPP.
2) *Case Discussion*. The objective of this session block is to understand the importance of developing an exit strategy for mining companies. The discussion block may focus on how to craft an exit strategy.
3) *Synthesis:* The objective of this session block is to wrap-up the discussion about the case. The students should also provide suggestions on how RRPP could regain the social license to operate. As an epilogue, the initiatives of RRPP in re-gaining SLTO should also be presented

KEY MESSAGES

Key Observations of the Case

- Attitude of stakeholders is affected by legacy issues.
- Mining companies and stakeholders need to work together to ensure social and economic development.
- Mining companies need to be transparent and sincere with their stakeholders.

Key Messages of the Session

- The definition of sustainability for the mining industry is based on its unique characteristics: 1) it has a heavy footprint and 2) mineral deposits are finite. Based on these characteristics, sustainability for mining companies refers to the need to first ensure that the positive impact of mining operations lasts beyond the life of the mine and second, to ensure that the negative effects of mining operations are sufficiently

[1]Australian Government- Department of Resources, Energy and Tourism. (October 2006). "Mine Closure and Completion". Part of the Leading Practice Sustainable development Program for the Mining Industry. Accessed at http://www.ret.gov.au/resources/Documents/LPSDP/LPSDP-MineClosureCompletionHandbook.pdf

addressed during the life of the mine and that no negative impact lasts beyond mine's life.

- Mining companies need to give priority to environmental protection as part of their sustainability initiatives. Disregarding environmental impact of mining operations could cause a conflict between the mining company and its stakeholders.
- Mining companies need to integrate a sustainability development framework in all stages of the mine. Planning and implementation of an exit strategy run across all stages of the mine.
- Stakeholders need to play a proactive role in the exit strategy because they will be the ones who would continue the sustainability programs after the mine closes.
- The challenge for mining companies is to find another source of livelihood for the community.
- Ownership, co-creation and co-ownership are key in a successful and sustainable stakeholder engagement strategy.

REQUIRED MATERIAL

Case: Uy, Ryan Vincent. "Rebuilding Trust: The Rapu-Rapu Experience", *CSR in Mining for APEC Economies*. Asia Pacific Economic Cooperation Secretariat.

Reading: Herrera, Maria Elena. (2011). "Corporate Social Mining Sector for APEC Economies", *CSR in Mining for APEC Economies*. Asia Pacific Economic Cooperation Secretariat.

REFERENCES

Herrera, Maria Elena. (2011). "Corporate Social Mining Sector for APEC Economies", *CSR in Mining for APEC Economies*. Asia Pacific Economic Cooperation Secretariat.

Department of Industry Tourism and Resources, Government of Australia. (2006) "Mine Closure and Completion: Leading Practice Sustainable Development Program for the Mining Industry." Accessed from http://www.ret.gov.au/resources/Documents/LPSDP/LPSDP-MineClosureCompletionHandbook.pdf

Department of Industry Tourism and Resources, Government of Australia. (2006) "Mine Rehabilitation: Leading Practice Sustainable Development Program for the Mining Industry." Accessed from http://www.ret.gov.au/resources/Documents/LPSDP/LPSDP-MineRehabilitationHandbook.pdf

PREREQUISITES, IF ANY

- A Discussion on Legacy Issues and Social License to Operate
- A Discussion on the Stages of Mining

SPECIAL REQUIREMENTS:

a. **Preparation:** Prepare a slide with the student's study questions
b. **Equipment and supplies required:**
   For the Room Set-up: LCD Projector and Screen; Laptop; Mic/lapel; Whiteboard and markers; USB for transferring the presentations; Recorder
c. **Room lay-out:** Classroom style and can group area
d. **Staff support required:** 1 staff to insert the presentation and to document the event, and distribute the supplies to the participants

FIGURES AND FRAMEWORKS

Below are the figures and frameworks that could be used in this session. Please refer to the section on the List of Figures and Frameworks.

- Box 2: Components of Value Chain Analysis
- Table 3: Mine Stages and Key Activities

Session Brief – For Teachers

PERFORMANCE MONITORING AND EVALUATION

CSR in APEC Mining: Train the Trainers Program

Session Code: 4A
Session Title Performance Monitoring and Evaluation
Session Topic Performance Monitoring and Evaluation
Session Format Lecture Discussion

ABSTRACT

The primary objective of the session is to present the significance of performance monitoring and evaluation. The session will begin with a brief overview of the importance of measuring the company's performance and then present CSR monitoring indices.

Performance monitoring and evaluation assess how companies are performing based on the expectations of stakeholders. Qualitative and quantitative indicators are commonly used in assessing the performance of mining companies in the areas of environment and community development.

Metrics used in evaluating CSR programs should be relevant, meaningful, actionable and credible. The company and its stakeholders must believe/trust in the metrics used in evaluating the company's performance. Perspective of all stakeholders must be taken into consideration.

LEARNING OBJECTIVES

- To provide an understanding of the importance of measuring and evaluating the company's performance in relation to its social and environmental initiatives; and
- To provide an understanding of how to identify qualitative and quantitative indicators

STUDY QUESTIONS AND/OR HOMEWORK ASSIGNMENT

- What is the importance of measuring CSR programs?
- How do you measure the impact of CSR programs?
- What are the qualitative and quantitative indicators of the CSR programs?
- How do you define a successful CSR program?
- Who is your audience?

This session brief was written by Maria Cristina I. Alarilla under the supervision of Assoc. Prof. Maria Elena B. Herrera for the project entitled, "CSR in APEC Mining: Train the Trainers Program" This APEC funded project was implemented by the RVR Center for Corporate Social Responsibility.

CONTENT SUMMARY

The session begins with a presentation of the importance of performance monitoring and evaluation. The session then covers the characteristics of useful metrics as well as the challenges in developing CSR metrics. The presentation ends with a list of useful CSR indices used by various international institutions and multinational companies.

Importance of Performance Monitoring and Evaluation

Performance monitoring and evaluation are important because they enable companies to gauge their performance based on their expectations and the expectations of their stakeholders. By conducting an evaluation, companies would be able to identify problem areas and develop solutions to address these issues. Adjustments could also be made on the existing strategy to reach the desired results.

Monitoring and evaluation should not only be conducted at the end of the project period. It must be a continuous process. It should also be inclusive. The company and its stakeholders must be involved in the evaluation process so that their interests and concerns are raised and dealt with immediately. This also creates shared ownership.

Measuring CSR performance is difficult. Creativity plays an important role in identifying quantitative and qualitative indicators. There must be a shared understanding among stakeholders of what is their definition of "successful" and "important".

Characteristics of Metrics

Characteristics of useful metrics should be: relevant, meaningful, actionable and credible.

> A metric must provide information about something relevant and significant. For practical purposes, this generally means that the metric can be interpreted and, even more importantly, that there be enough information for managers to act upon to diagnose the causes of changes in the metric and to act upon these interpretations and conclusions to improve results. The metric must also be credible and objective. This means that the metric is not biased and will return the same value under identical circumstances. If the metric is to be used for comparison purposes, it must be a metric that is sufficiently universal that it can be developed across the spectrum of comparators as well as sufficiently fine tuned that it can show significant differentiation across comparators. Finally, the metric and any standard baselines must have general acceptability among the users of the metric.[1]

Metrics should also be integrated into the business system. This means that the company is able to integrate performance metrics into a single comprehensive measurement system that would guide management decisions and align corporate activity. An important aspect of an integrated metrics system is the idea of causal linkages, which link various business activities to the achievement of business objectives or goals. Another important aspect is ownership. Metrics must have a clear owner. Who is in charge of the metrics? Who will benefit from them? Who is the audience? [2]

In measuring CSR, it is not enough that metrics on CSR are created. They must be "embedded within a business model that has financial value creation as its end goal."

[1] Herrera, Maria Elena. (2009). "Some Approaches to Developing Useful CSR Metrics." Journal of Asian Management (Special Issue on Corporate Social Responsibility). Volume 01, Issue 01. Makati City: Asian Institute of Management.
[2] Ibid.

Challenges in creating CSR metrics include 1) a lack of consensus on what should be measured and the purpose of the measurement; and 2) a lack of understanding about who will use the metrics and their purpose.[1]

Audience of Metrics

There are two possible audience for CSR Metrics—company management and external stakeholders.

"Company management will use the metrics: 1) to help understand how the company is performing with respect to CSR and how that performance affects the company's performance in other business areas (and vice versa); and 2) to help guide management decisions, including policy-setting." [2] In creating a CSR metric for the company management, it is important to take into consider its primary concern—the objective of company management is to create financial value within the parameters of avoiding harm to society or to the environment. [3]

"External stakeholders would have an interest in the company's social and environmental footprint, how its activities shape those footprints and what capabilities it has for shaping those footprints." In developing a CSR metric for stakeholders, it is important to identify the key concerns of each. These stakeholders may include investors, customers, employees, suppliers, community, society, environment, government, media and non-profits.[4]

In measuring and reporting CSR, companies need to measure the short-term and long-term impact through qualitative and quantitative indicators. It is also important to mention that most companies tend to comprehensively report the impact of their CSR programs but fail to disclose the impact of their regular activities.[5]

Reporting CSR metrics should also consider the target audience. For company management, results of CSR metrics must help them identify the gaps in business processes and how to improve business operations. For external stakeholders, results of CSR metrics must be short and understandable. A CSR report must anticipate what is important for the stakeholders. The language of the external stakeholders must also be considered.

Examples of CSR Metrics

Useful CSR metrics are: Corporate Social Performance; Tata Index for Sustainable Human Development; Social Footprint; Accountability Indices; Global Reporting Initiative; and ISO 26000.

Developing an Integrated CSR Metrics

An integrated CSR metrics must be based on the company's value chain, competencies and capabilities, footprint, and stakeholders. The useful metrics enumerated above could be used as a guideline in crafting their own metrics.

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[1] Ibid.
[2] Herrera, Maria Elena. (2009). "Some Approaches to Developing Useful CSR Metrics." Journal of Asian Management (Special Issue on Corporate Social Responsibility). Volume 01, Issue 01. Makati City: Asian Institute of Management.
[3] Ibid.
[4] Ibid.
[5] Ibid.

CSR metrics of companies must include:

- Inputs -- resources used in the completion/implementation of the CSR activity (i.e. monetary resources, number of hours allocated per employee, number of employee). Moreover, quality of inputs must also be measured.
- Outputs -- the immediate impact of the CSR activity. This may refer to the number of beneficiaries or number of trees planted.
- Outcomes -- the long-term impact of the CSR activity (i.e. change in behavior, improvement in skills or increased income). For example, the outcome of the livelihood training program will look at the increased income of the beneficiaries over a period of time. The outcome of the teacher training program could be better test scores of students.
- Relationships of inputs to outcomes -- productivity measures. This refers to the efficiency and effectiveness of the inputs to meet the desired outcomes.

Formulating CSR metrics must be a holistic approach. The metric must be integrated into a company's business operations and guide management decisions to reach business objectives. It must have ownership and an audience. It must be shared and understood by company management and external stakeholders.

SESSION SEQUENCE PLAN

The session is only scheduled for 70 minutes. The session will have four blocks: 1) Importance of Performance Monitoring and Evaluation; 2) Characteristics of Useful CSR Metrics; 3) Challenges of Developing CSR Metrics; and 4) Examples of Useful CSR Metrics.

1) Importance of Performance Monitoring and Evaluation: The objective is for the participants to appreciate performance monitoring and evaluation—not only for internal use but also for reporting to stakeholders.
2) Characteristics of Useful CSR Metrics: The objective is for the participants to understand how to identify metrics for CSR programs. It would be helpful for the participants if characteristic is translated into an actual example.
3) Challenges of developing CSR Metrics: The objective is for the participants to know the challenges of developing CSR metrics. By having this information, the participants should be able to identify strategies in addressing these problems in their companies.
4) Examples of Useful CSR Metrics: The objective is for the participants to become familiar with various CSR metrics used by international organizations or multinational companies. These examples are guideposts in selecting the appropriate and relevant metrics for their program/initiative/ strategy.

KEY MESSAGES

- The definition of sustainability for the mining industry is based on its unique characteristics: 1) it has a heavy footprint and 2) mineral deposits are finite. Based on these characteristics, sustainability for mining companies refers to the need to first ensure that the positive effects of mining operations last beyond the life of the mine and second, to ensure that the negative effects of mining operations are sufficiently addressed during the life of the mine and that no negative effect lasts beyond mine life.
- Monitoring and evaluation is a continuous process. The CSR plan developed in the pre-exploratory stage must be continuously verified and updated.
- Measuring CSR initiatives is a challenge because it is difficult to identify statistics

that would measure the long term impact of the program. A causal linkage analysis is a useful tool.

- CSR metrics must make sense not only to the company but also to its stakeholders. Companies must take into consideration the inputs and perspective of their stakeholders in measuring the success of its CSR initiatives. The objectives and measures of the CSR metrics must also be accepted by and credible to the stakeholders.
- All stakeholders (internal and external to the company) must buy in to the CSR metrics used.
- CSR metrics are not one size fits all. Companies need to develop CSR metrics appropriate to their situation.

REQUIRED MATERIAL

Herrera, Maria Elena. (2009). "Some Approaches to Developing Useful CSR Metrics." Journal of Asian Management (Special Issue on Corporate Social Responsibility). Volume 01, Issue 01. Makati City: Asian Institute of Management.

REFERENCES

Herrera, Maria Elena. (2007). "Measuring CSR Performance*," in Doing Good in Business Matters: CSR in the Philippines (Frameworks)*. Makati City, Asian Institute of Management.

Herrera, Maria Elena. (2009). "Some Approaches to Developing Useful CSR Metrics." Journal of Asian Management (Special Issue on Corporate Social Responsibility). Volume 01, Issue 01. Makati City: Asian Institute of Management.

Australian Government- Department of Resources, Energy and Tourism. (2009). "Evaluating Performance: Monitoring and Auditing: Leading Practice Sustainable Development Program for the Mining Industry." Accessed at http://www.ret.gov.au/resources/Documents/LPSDP/EvaluatingPerformanceMonitoringAuditing_web.pdf

FIGURES AND FRAMEWORKS

Below are the figures and frameworks that could be used in this session. Please refer to the section on the List of Figures and Frameworks.

- Slides on Metrics
- Table 2: List of Stakeholders and their Concerns
- Table 6: GRI and ISO 26000 Mapping

Session Brief – For Teachers

ANTAMINA AND THE MINING FUND

CSR IN APEC MINING: TRAIN THE TRAINERS PROGRAM

Session Code: 4B
Session Title: Performance Monitoring and Evaluation or Planning for Rehabilitation and Decommissioning
Session Topic: Antamina and the Mining Fund
Session Format: Case Discussion
Special Preparation

- For case discussion: Please refer to Special Requirements Section.
- Materials to be distributed beforehand: Antamina Teaching Case

ABSTRACT

The main objective of the session is to use the case as a platform to understand the framework and process of monitoring and evaluation in preparation for the rehabilitation and decommissioning phase.

The Antamina case provides an opportunity to discuss performance metrics. It is also an opportunity to discuss the rehabilitation and closure plan

The case will present the initiatives of a company that is trying to limit the dependency of communities on the mining company by allocating a mining fund for community development programs. The central question is "What is the impact of the mining fund on the host community? Is it sustainable?"

Discussion covers the importance of monitoring and evaluation of the company's performance. Performance monitoring is key in assessing whether the company is able to meet stakeholder expectations as well as if it is able to mitigate its environmental impact. Stakeholders have different interpretations of "good company performance"— including compliance, environmental performance, employee safety and community relations.

The case, Antamina and the Mining Fund, presents the social development programs of Antamina as well as the outcomes of these initiatives. In 2007, Antamina was ranked first among socially responsible companies in Peru. It was the first company to establish a Mining Fund in compliance with local mining laws. The Antamina Mining Fund seeks to promote regional development in the areas of education, health, infrastructure and livelihood programs.

Despite the positive impact of the social programs on the host community, some local officials are concerned that the community has become over dependent on Antamina.

This session brief was written by Maria Cristina I. Alarilla under the supervision of Assoc. Prof. Maria Elena B. Herrera for the project entitled, "CSR in APEC Mining: Train the Trainers Program" This APEC funded project was implemented by the RVR Center for Corporate Social Responsibility.

Antamina has expressed its interest in extending mine life to 2029. Although the expansion benefits the Ancash region in the long run, it would mean a decrease in income for the region and the local government units. To ease the potential negative impact of this move, Antamina carried out direct and indirect compensation programs.

LEARNING OBJECTIVES

- To provide an understanding of the importance of meeting stakeholder expectations;
- To provide methods in measuring company's performance;
- To provide an understanding on how to develop a sustainable exit strategy

STUDY QUESTIONS AND/OR HOMEWORK ASSIGNMENT

- How would you rate Antamina's CSR strategy and initiatives? What criteria would you use?
- How would you go about developing performance indicators?
  What are the key concerns that need to be addressed? What needs to be taken into consideration? What would you recommend Antamina do?

CASE CONTENT

Performance measurement and evaluation are key to assess if sustainable initiatives of companies are effective in addressing social and environmental concerns as well as in mitigating the environmental impact of mining operations.

Planning for rehabilitation and decommissioning should start at the pre-exploration and exploration stage. As mining companies go through the mine stages, components of the sustainable development plan must be implemented.

Definition of Monitoring and Auditing

A comparative definition of monitoring and auditing is presented below. This is an extract from "Evaluating Performance: Monitoring and Auditing."

> Monitoring is the gathering, analysis and interpretation of information for the assessment of performance. Examples commonly used in the resources industry include monitoring of water quality, impacts on flora and fauna (as well as recovery following the implementation of control or rehabilitation measures), social aspects and community development, air quality, noise, vibration, greenhouse gas emissions, and the extent to which rehabilitation and final land use objectives are being met.

Auditing is systematically reviewing monitoring procedures and results, and checking that all commitments have been fulfilled or completed by comparing the audit findings against agreed audit criteria. Auditing can be undertaken internally, by experts in specific disciplines who provide a check on methods or success against internal company standards, or externally, by an independent consultant or expert

A comparative definition of monitoring and auditing is presented below. This is an extract from "Evaluating Performance: Monitoring and Auditing."

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and the extent to which rehabilitation and final land use objectives are being met.

Auditing is systematically reviewing monitoring procedures and results, and checking that all commitments have been fulfilled or completed by comparing the audit findings against agreed audit criteria. Auditing can be undertaken internally, by experts in specific disciplines who provide a check on methods or success against internal company standards, or externally, by an independent consultant or expert who can demonstrate transparency and add value to the audit process.[1]

Monitoring

Metrics must be useful and understood not only by company management but also by external stakeholders.

For the mining industry, various aspects must be considered in the design, and implementation of performance monitoring. (See Key Characteristics in the Design and Implementation of Performance Monitoring)

The mine plan helps companies in measuring and evaluating its performance. If there are changes in the mine plan, then the monitoring programs are consequently adjusted. The timeframe for monitoring programs varies: Annually (for individual tasks); Medium-term (changes in infrastructure or production); and Life-of-mine (changes in the rate of operation). "The key element is to ensure monitoring programs are aligned to the production and construction aspects of operational planning."[2]

Monitoring programs could be influenced by several factors. These are presented below. This is an extract from "Evaluating Performance: Monitoring and Auditing."

- Changes to the mine plan (for example, expansion or contraction of an operation)
- Changes in the type of mining (for example, from open-cut to underground) or in the ore mined and processed on the site (for example, from oxide to sulphide)
- Extreme events that may cause the company to adjust the assumptions upon which planning has been based and risk assessed
- A significant incident at another mine site of a similar type or in the same region (for example, deaths of flora and/or fauna, or community health impacts)
- Changes within a community as a mine matures through its life-cycle (for example, community stabilisation following periods of substantial population expansion).

The monitoring plan differs for assessing the environmental and socio-economic impact. Elements of a monitoring plan are presented below. This is an extract from "Evaluating Performance: Monitoring and Auditing."

- Environmental Monitoring: Open-pit; Waste Rock Dump; Tailings Storage Facility; Radioactive Minerals.

[1]Australian Government- Department of Resources, Energy and Tourism. (October 2009). "Evaluating Performance: Monitoring and Auditing." Handbooks on Leading Practice Sustainable Development Program for the Mining Industry. Accessed at http://www.ret.gov.au/resources/Documents/LPSDP/EvaluatingPerformanceMonitoringAuditing_web.pdf

[2]Australian Government- Department of Resources, Energy and Tourism. (October 2009). "Evaluating Performance: Monitoring and Auditing." Handbooks on Leading Practice Sustainable Development Program for the Mining Industry. Accessed at http://www.ret.gov.au/resources/Documents/LPSDP/EvaluatingPerformanceMonitoringAuditing_web.pdf

- Socio-economic Monitoring: 1) Economic: the stock of financial resources available to a community; 2) Social: networks and relationships that enable cooperation; 3) Human: the stock of skills and knowledge of a community; 4) Built: the physical infrastructure available to a community, including telecommunications; and 5) Natural: access to key natural resources such as land, water and clear air

Auditing

Audit refers to the current performance based on a specific criterion. (See Key Messages in Auditing)

For mining companies, auditing could refer to environment, social performance and safety. The Evaluating Performance: Monitoring and Auditing Handbook presented several examples of sustainability audits and standards of mining companies.

- "An 'environmental performance audit' is directed at verifying a mine's environmental status with respect to specific, predetermined audit criteria." It includes Environmental Management Systems Audit, Compliance Audit, Energy Audits, Waste Audits, Environmental Site Audits, and Environmental Security Audit.
- "Social or community relations audits are required by governments and lending institutions for major resource and infrastructure projects (for example, mining, forestry, dams, power transmission lines, roads and railways or ports), especially in developing countries and to a lesser extent in developed countries."
- The International Finance Corporation Performance Standard is an example of the performance standard on social and environmental sustainability. There are eight components of the IFC performance standard: (1) Social and Environmental Assessment and Management Systems; (2) Labor and Working Conditions; (3) Pollution Prevention and Abatement; (4) Community Health, Safety and Security; (5) Land Acquisition and Involuntary Resettlement; (6) Biodiversity Conservation and Sustainable Natural Resource Management; (7) Indigenous Peoples; and (8) Cultural Heritage.

Planning for Rehabilitation and Decommissioning

Planning for rehabilitation and decommissioning starts at the early stages of the mine cycle. Sustainable development and mine rehabilitation must cover environmental and social aspects. A summary of sustainable development concerns are presented below. This is an extract from "Mine Rehabilitation."

- Environmental aspects: Regulatory aspects and Physical constraints (i.e. Climate, Size, Soil/Rock Types)
- Social Aspects: Community engagement; Indigenous heritage management; and Non-indigenous heritage management.

The business case in using a sustainable development framework in mine rehabilitation includes 1) improved mine management; 2) improved stakeholder engagement in planning and decision-making; and 3) reduction of risks and liabilities. (See Business Case for Sustainable Development Framework)

The sustainable development plan runs across all the mine stages. A summary of the activities in planning and implementation of the sustainable development plan is provided below. This is an extract from "Mine Rehabilitation."

Planning

- Consultation during initial mine planning
- Legal Requirements
- Materials Characterization (i.e. Mineralogical analysis, Physical analysis, Erodability, Chemical analysis, Extremes of pH, Salinity, Sodicity and potential to tunnel, Plant nutrients, Biological Analysis), Materials segregation and selective placement, and Material budget and schedule
- Site assessment: Protection Measures (i.e. Rare and endangered species, Heritage sites); Climate; Growth Media; Salt budget
- Planning the rehabilitation program: Landform design and Rehabilitation processes

Operations

- Consultation during mine operations
- Minerals characterization
- Materials handling
- Mine waste water balances: Waste rock and tailings
- Landform reconstruction
- Covers: Natural analogues; Possible components of a cover system; possible cover materials; Cover types
- Waste storage outer slopes: Limiting erosion off outer slopes
- Topsoil Management: Topsoil handling; Preserving soil fertility and biota; Topsoil treatments
- Establishing vegetation communities: Effects of vegetation on erosion; Controlling weeds; Defining a functional ecosystem; Vegetation establishment
- Establishing fauna communities: Controlling problem animals; constructing fauna habitat
- Revegetation of non-mined areas
- Establishment of pasture and commercial reforestry
- Monitoring and maintenance

Closure

- Consultation during mine closure
- Development of rehabilitation success criteria
- Development of a rehabilitation monitoring program: Setting rehabilitation goals; the role of analogues; selecting monitoring parameters; selecting of a monitoring approach; reviewing monitoring results
- Development of a monitoring manual
- Lease relinquishment

SESSION SEQUENCE PLAN

The session will have three discussion blocks: 1) Foundation setting; 2) Lessons Learned; 3) Synthesis.

1) *Foundation Setting (15 minutes):* The objective of this session block is to clarify the key case facts in order to arrive at clarity in terms of what the key questions of the case are. Students are expected to comment on how large an operation Antamina is and how important it would be economically to the economy and to the local community. Students should be encouraged to speak about what the current situation is and what concerns need to be addressed.
2) *Lessons Learned (45 minutes):* The objective of this session block is for the participants to identify key lessons learned from the case. The following questions should be posed and discussed (1) How do you evaluate the programs of

Antamina? How well do you believe they are doing? What are the stakeholder reactions to the Antamina programs?; (2) What can be learned from this?; and (3) How would you recommend the company move forward?

3) *Synthesis (20 minutes):* The objective of this session block is to wrap-up the discussion on the importance of monitoring and evaluation for mining companies especially in planning for eventual exit.

KEY MESSAGES

Key Observations of the Case

Mining companies need to evaluate their environmental footprint. A specific set of metrics must be identified. A third-party evaluation must be conducted to ensure validity and transparency.

- Mining companies need to ensure that the community and other stakeholders are not dependent on their operations. Mining companies need to develop social programs that would be continued by the community after operations close.
- Although a mining fund could address post-mining concerns, proper allocation and use must be ensured. Thus, there is a need to enable the stakeholders to effectively use the mining fund.

Key Message of the Session

- The definition of sustainability for the mining industry is based on its unique characteristics: 1) it has a heavy footprint and 2) mineral deposits are finite. Based on these characteristics, sustainability for mining companies refers to the need to first ensure that the positive impact of mining operations lasts beyond the life of the mine and second, to ensure that the negative effects of mining operations are sufficiently addressed during the life of the mine and that no negative impact lasts beyond the mine's life.
- The evaluation results could be used to adjust the exit strategy.
- CSR Metrics must be acceptable to all stakeholders.
- A sustainable exit strategy must be implemented.

At the rehabilitation and closure stage, mining companies need to measure its performance in order to check whether it was able to meet its sustainability targets.

REQUIRED MATERIAL

Case: Decena, Maria Jilla Phoebe (2011). "Antamina and the Mining Fund", *CSR in Mining for APEC Economies*. Asia Pacific Economic Cooperation Secretariat.

Recommended Reading:

Herrera, Maria Elena. (2008) "Strategic Metrics." AIM Reading (not published)

Herrera, Maria Elena. (2009) "Some Approaches to Developing Useful CSR Metrics." In AIM Journal of Asian Management, Special Issue on Corporate Social Responsibility (Volume 01, Issue 01). Makati City: Asian Institute of Management

REFERENCES

Herrera, Maria Elena. (2011). "Corporate Social Mining Sector for APEC Economies", *CSR in Mining for APEC Economies*. Asia Pacific Economic Cooperation Secretariat.

Herrera, Maria Elena and Jilla S. Decena. (2007). "Measuring CSR Performance" in Doing Good in Business Matters: CSR in the Philippines (Frameworks). Makati City: AIM and DLSU.

Australian Government- Department of Resources, Energy and Tourism. (October 2009).

"Evaluating Performance: Monitoring and Auditing." Handbooks on Leading Practice Sustainable Development Program for the Mining Industry. Accessed at http://www.ret.gov.au/resources/Documents/LPSDP/EvaluatingPerformanceMonitoringAuditing_web.pdf

Australian Government- Department of Resources, Energy and Tourism. (October 2006). "Mine Rehabilitation." Handbooks on Leading Practice Sustainable Development Program for the Mining Industry. Accessed at http://www.ret.gov.au/resources/Documents/LPSDP/LPSDP-MineRehabilitationHandbook.pdf

PREREQUISITES, IF ANY

- A Discussion on the Mining Stages
- A Discussion on Monitoring and Evaluation

SPECIAL REQUIREMENTS:

a. **Preparation:** Prepare a slide with the discussion questions
b. **Equipment and supplies required:** For the Room Set-up: LCD Projector and Screen; Laptop; Mic/lapel; Whiteboard and markers; USB for transferring the presentations; Recorder for each can group: Participants must be divided into groups with 5-6 members each. Each Can Group must have manila paper or flip chart, markers, meta cards, masking tape.
c. **Room lay-out:** Classroom style and can group area
d. **Staff support required:** 1 staff to insert the presentation and to document the event, and distribute the supplies to the participants

FIGURES AND FRAMEWORKS

Below are the figures and frameworks that could be used in this session. Please refer to the section on the List of Figures and Frameworks.

- Box 1: Business Case for Sustainable Development Framework
- Box 8: Key Messages in the Design and Implementation of Performance Monitoring
- Box 9: Key Messages in Auditing

Session Brief – For Teachers

PHILEX MINING CORPORATION: MULTI-SITE IMPLEMENTATION OF CSR

CSR IN APEC MINING: TRAIN THE TRAINERS' PROGRAM

Session Code: 4C
Session Title: Integration
Session Topic: Philex Mining Corporation: Multi-Site Implementation of CSR
Session Format: Case Discussion
Special Preparation

- For lecture and case discussion: Please refer to the section on Special Requirements.
- Materials to be distributed beforehand: Philex Teaching Case

ABSTRACT

The main objective of the session is to present the entire mining process in terms of the activities and key issues faced by mining companies.

The Philex case provides an opportunity to discuss the best practices in addressing environmental and social concerns. It also provides an opportunity to look at how one company was able to cascade its CSR policy to the different mine sites.

The case will present the CSR framework of a company and how it was implemented in its various mine sites in the Philippines. The central questions are "What are the issues and concerns faced by mining companies in the different mining stages? How do you address social and environmental concerns? How important is a CSR policy?"

Discussion covers the best practices in implementing CSR strategy and programs, especially for multiple mine sites. The challenge for the company to ensure that it is able to get all mine sites to adhere to the main CSR agenda of the company and at the same time effectively address environmental and social issues at respective mine site.

Philex Mining Corporation is one of the longest operating mining companies in the Philippines. It has several active mine sites, which are in the various mining stages. PMC has received numerous awards on community development and sustainable mining practices.

This session would focus on the issues and best practices of the company in implementing programs in different mine sites.

This session brief was written by Maria Cristina I. Alarilla under the supervision of Assoc. Prof. Maria Elena B. Herrera for the project entitled, "CSR in APEC Mining: Train the Trainers Program" This APEC funded project was implemented by the RVR Center for Corporate Social Responsibility.

LEARNING OBJECTIVES

- To provide an understanding of the issues and concerns faced by mining companies in the different mining stages
- To provide an understanding of how mining companies would be able to address the needs of the community in every mine stage
- To provide an understanding of the importance of a CSR framework in guiding company operations and how company policies could be applied in the different mine sites

STUDY QUESTIONS AND/OR HOMEWORK ASSIGNMENT

- How did Philex implement CSR programs across the different mine sites?
- What are the key concerns across the different stages of mining?
  Who are the stakeholders and what are their concerns?

CASE CONTENT

The mining industry is heavily regulated due to its footprint. the challenge for mining companies is how to comply with these regulations and also ensure that its internal policies are consistent. One framework that addresses both issues is the concept of Sustainable Development. (See Sustainable Mining Practices Framework)

The external and internal analysis of regulations and frameworks is presented below.

The concept of sustainable development also addresses various concerns and needs in the different mining stages. (See Mining Stages and Key Activities)

Key stakeholders and their concerns vary not only in every mining operation; but also in every mine site. (See Mining Stakeholders and Interests across the Mining Stages)

The sustainable development program of mining companies must be holistic. It needs to take into account all of its positive and negative effects on the economy, environment and society. Throughout the different mining stages, it needs to develop a strategy that is able to continue the positive impact post-closure and eliminate the negative impact post-operations.

External	Internal
Regulatory Environment, General public sentiment	PMC brief history (CSR embedded in vision mission)
Government Agencies & Roles	CSR Principles & Core Values
Legislation/Compliance requirements for mining	CSR Framework

SESSION SEQUENCE PLAN (80 MINUTES)

The session will have five discussion blocks: 1) Background of Philiex Mining Corporation; 2) Regulatory Environment; 3) Case Facts and Stakeholder Analysis; 4) Compare and Contrast; and 5) Synthesis.

1) *Background of Philex Mining Corporation:* The objective of this session block is to discuss the background information of Philex Mining Corporation. It includes the company history, Vision and Mission, CSR principles and core values, and CSR Framework.

2) *Regulatory Environment:* The objective of the session block is to identify the government agencies and their roles. It would also focus on the legislation and compliance requirements for mining.
3) *Case Facts and Stakeholder Analysis per site:* The objective of this session block is to identify the stakeholders in every mine site of PMC (i.e. Benguet, Surigao and Sipalay) as well as their concern.
4) *Compare and Contrast:* The objective of this session block is to present the stakeholder needs and CSR approach in each site. The implementation strategies adopted by each site can be highlighted.
Synthesis: The objective of this session block is to summarize the key messages of the case and the session. Discussion could also focus on how the participants could apply these lessons as a CSR practitioner.

KEY MESSAGES

Key Observations of the Case

- Issues and stakeholders vary site by site and even stage by stage. The concerns and needs of stakeholders vary depending on the location of the mine site and the mining stages.
- It is important to engage all stakeholders—both internal and external. The company needs to engage both internal and external stakeholders in developing and implementing its CSR and sustainability initiatives.
- Change takes time. Change can't be inflicted because people. The company should entice and encourage people to change. Real or permanent change only happens when the people involved have the same understanding and the underlying structures are changed—only then will we understand why we need to and how we are going to change.
- Trust and Credibility. To effectively engage stakeholders (and to gain FPIC), mining companies need to build trust and credibility with the community. The foundation of trust is sharing a common concern. Mining companies must only promise things that they think they can do. Companies should not make empty promises.

Key Message of the Session

- The definition of sustainability for the mining industry is based on its unique characteristics: 1) it has a heavy footprint and 2) mineral deposits are finite. Based on these characteristics, sustainability for mining companies refers to the need to first ensure that the positive impact of mining operations lasts beyond the life of the mine and second, to ensure that the negative effects of mining operations are sufficiently addressed during the life of the mine and that no negative impact lasts beyond the mine's life.
- CSR must be responsive and suited to the specific needs of the community. Environmental and stakeholder issues vary in the different mining stages.
- CSR policy acts as a guide for mining companies in implementing sustainable development framework.
- There is no one-size-fits-all CSR program. Although the mining industry has a specific set of environmental and social concerns, the context of these concerns varies in each mine site. This implies that localized approaches must be implemented to address these issues.

REQUIRED MATERIAL

Case: De Jesus, Marie Kirstin. (2011). "Philex Mining Corporation: Multi-Site Implementation of CSR", *CSR in Mining for APEC Economies*. Asia Pacific Economic Cooperation Secretariat.

Reading: Herrera, Maria Elena. (2011). "Corporate Social Mining Sector for APEC Economies", *CSR in Mining for APEC Economies*. Asia Pacific Economic Cooperation Secretariat.

RECOMMENDED READINGS

Department of Industry Tourism and Resources, Government of Australia. (2006) "Mine Closure and Completion: Leading Practice Sustainable Development Program for the Mining Industry." Accessed from http://www.ret.gov.au/resources/Documents/LPSDP/LPSDP-MineClosureCompletionHandbook.pdf

Department of Industry Tourism and Resources, Government of Australia. (2006) "Mine Rehabilitation: Leading Practice Sustainable Development Program for the Mining Industry." Accessed from http://www.ret.gov.au/resources/Documents/LPSDP/LPSDP-MineRehabilitationHandbook.pdf

REFERENCES

Herrera, M.B., Alarilla, M.I., Decena, M.S. and de Jesus, M.C. (2011). Corporate Social Responsibility in the APEC Mining Sector (Educational Framework). In APEC Secretariat, *CSR in the APEC Mining Sector*. APEC Secretariat.

PREREQUISITES, IF ANY

1. A Discussion on Responsible Mining
2. A Discussion on the Stages of Mining

SPECIAL REQUIREMENTS:

a. **Preparation:** Prepare a slide with the student's study questions
b. **Equipment and supplies required:**
   For the Room Set-up: LCD Projector and Screen; Laptop; Mic/lapel; Whiteboard and markers; USB for transferring the presentations; Recorder
c. **Room lay-out:** Class room set-up; please make sure that there is enough space in the room for the meta-cards to be posted
d. **Staff support required:** 1 staff to insert the presentation and to document the event.

FIGURES AND FRAMEWORKS

Below are the figures and frameworks that could be used in this session. Please refer to the section on the List of Figures and Frameworks.

- Figure 7: Sustainable Mining Practices Framework
- Table 3: Mining Stages and Key Activities
- Table 4: Mining Stakeholders and Interests across the Mining Stages
- Figure 10: Mapping Footprint and Stakeholder in the Mine Life Cycle

Session Brief – For Teachers

INTEGRATION

CSR IN APEC MINING: TRAIN THE TRAINERS PROGRAM

Session Code 4D
Session Title Integration
Session Topic Integration
Session Format Lecture Discussion

ABSTRACT

The primary objective of the session is to summarize the important points raised during the training program. A review of the systems and stages frame will also be conducted. The session will also discuss the following: co-creation and co-ownership; trust, leadership and credibility; bridging leadership; and appreciative inquiry.

Mining companies face complex issues and concerns not only due to stakeholder expectations but also because of the nature of their business. Mining operations have a positive and negative impact on the host community's economy, social fabric and environment.

Co-creation and co-ownership are key in implementing social development programs. Mining companies and their stakeholders must have a shared ownership of the social programs to be successful and effective.

Mining companies must establish trust among their stakeholders. Stakeholders must believe in the promises made by mining companies; and in turn, mining companies must keep their commitments.

Mining companies must take a leadership role in promoting environmental sustainability and community development. Their intentions must be credible and genuine.
The Bridging Leadership Framework and the concept of Appreciative Inquiry could help mining companies develop a collaborative imitative with their stakeholders.

LEARNING OBJECTIVES

- To provide a summary of the important frameworks and approaches discussed during the training program;
- To review the important points raised during the training program

This session brief was written by Maria Cristina I. Alarilla under the supervision of Assoc. Prof. Maria Elena B. Herrera for the project entitled, "CSR in APEC Mining: Train the Trainers Program" This APEC funded project was implemented by the RVR Center for Corporate Social Responsibility.

STUDY QUESTIONS AND/OR HOMEWORK ASSIGNMENT

- What is the most important lesson you learned in this training? How will you use it in your company?
- What are your key insights with respect to CSR and the mining industry?

CONTENT SUMMARY

The session begins with a summary of the economic, social and environmental impact of mining operations. The Systems Frame and the Stages Approach will also be presented. The session then covers the key messages raised in the course of the training program. This may include: co-creation and co-ownership; trust, leadership and credibility; and appreciative inquiry.

Impact of Mining Operations: Economic, Environment and Social

Mining operations have a significant impact on the economy, the environment and the community in which it operates. At every stage, mining companies need to account for the following:

Economic	Environmental	Social
Pre Exploration and Exploration		
- Job generation for local communities	- Rehabilitation of drilled areas - Siltation	- Employment (temporary) - Mining rights - Information dissemination - Displacement of residents - Public participation - Legacy issues
Operations		
- Contribution to taxes, GDP and exports - Allocation and use of revenues - Proper accounting • Development of local industries	- Acid mine draining - Siltation - Water and air pollution - Mine tailings spill - Changes geography - Impact on biodiversity - Heavy metal contamination - Deforestation	• Job Generation - Employment - Reliance of the community on the mining company - Social investment - Community Development (wants vs. needs) - Social dislocation - Legacy issues • - Impact on local culture
Decommissioning and Rehabilitation		
- Mined areas may become “ghost” towns	- Facility Maintenance - Mine Site Rehabilitation - Change in geographical profile mine site	- Boom-bust cycle - Unemployment

Frameworks: Systems Frame and the Stages Approach

Since the mining industry has a heavy footprint and operates in stages, the Systems Frame and the Stages Approach depict the dynamics and relationships present in mining operations.

The System Frame is divided into three components — 1) Stakeholders and Concerns; 2) Performance Monitoring and Evaluation; and 3) Regulation, Revenue Distribution and Management. The Systems Frame identifies the key stakeholders that affect mining operations as well as the stakeholders that influence mining activities. Each stakeholder has specific social, economic, and environmental concerns. The Systems Frame also presents the need for performance monitoring and evaluation due to its environmental and social impact. Mining companies also need to ensure that they meet shareholder and stakeholder expectation. Finally, the Systems Frame presents the need for mining companies and their stakeholders to work towards cooperation. (See Figure 9: Systems Frame)

The Stages Approach presents the key activities of mining companies at each stage.

- Pre-Exploration: Submission of Government and Environmental Permits; Information and Education Campaign; Initial Stakeholder Engagement
- Exploration: Completion of Baseline Environmental and Social Reports; License to Operate, esp. from Direct Impact Stakeholders; Relocation and Resettlement Initiatives; Infrastructure Development (Mine Site and Auxiliary/Support Infrastructure)
- Extraction: Compliance with Government Regulations; Reporting and Monitoring (Environment, Community)
- Closure: Re-Evaluation and Implementation of an Exit Plan (Environment, Community related)
- Rehabilitation: Continuation of Positive Effects; Elimination of Negative Effects; Environmental Reporting and Monitoring

Throughout the mine life cycle, mining companies need to address mismatches between expected footprint, available resource and stakeholder expectations. (See Mapping Footprint and Stakeholders in the Mine Life Cycle, and Sustainability Activities across the Different Mining Stages)

Sustainability Frameworks

In all stages, mining companies implement stakeholder engagement, community development programs and environmental sustainability initiatives.

In implementing CSR programs, it is important that the mining company fosters co-creation and co-ownership. The mining company alone could not effectively address the social and environmental problems. It needs to partner with critical stakeholders.

- Co-creation: It is the "practice of finding a synergistic partner and creating something together. It is a 1+1=4 equation; win-win."[1]
- Co-ownership: It is where two or three parties share ownership of a social development program.

Trust, leadership and credibility are important to the company because they create a legitimate presence in the community where it operates. However, these values cannot be

[1] Maddock, G. Michael and Raphael Louis Viton. (November 2010). "The Innovation Engine: Co-Creation Innovation." Accessed at (July 2012).

achieved by the company single-handedly. It needs to communicate its genuine concern for the community and the environment. The community department cannot do this on its own. It must be a company-wide effort.

The *Bridging Leadership Framework* is an approach that acknowledges the importance of partnerships and community engagement in creating synergistic results. Based on the framework of Team Energy Center for Bridging Leadership, there are three phases—ownership, co-ownership and co-creation.

Appreciative inquiry is an approach that focuses on the skills and competencies of individuals, groups, or organizations and leverages these to create opportunities for engaging others and to develop innovative initiatives that address key concerns. It follows four cycle processes—discover, dream, design and destiny.

READING AND REFERENCES

Australian Government- Department of Resources, Energy and Tourism. (2011). "A Guide to Leading Practice Sustainable Development in Mining". Part of the Leading Practice Sustainable development Program for the Mining Industry. Accessed at http://www.ret.gov.au/resources/Documents/LPSDP/guideLPSD.pdf

SESSION SEQUENCE PLAN

The session is scheduled for 50 minutes. The session will have three blocks: 1) Review of the Systems Frame and Stages Approach; 2) Key concepts discussed in the training: co-creation and co-ownership; Trust, Leadership and Credibility; 3) Closing Statements.

1) *Review of Systems Frame and Stages Approach*: The objective is for the participants to understand the systems frame—particularly the relationship of mining company and stakeholders; impact to the environment; and key activities and concerns.
2) *Key concepts discussed in the Training*: The objective is for the participants to understand and learn how to practice the concepts of Co-Creation and Co-ownership; Trust, Leadership and Credibility; Bridging Leadership.
3) *Closing Statements*: The objective is for the participants to revisit the important points raised during the training program—which are not included in the topics mentioned above.

KEY MESSAGES

- The definition of sustainability for the mining industry is based on its unique characteristics: 1) it has a heavy footprint and 2) mineral deposits are finite. Based on these characteristics, sustainability for mining companies refers to the need to first ensure that the positive effects of mining operations last beyond the life of the mine and second, to ensure that the negative effects of mining operations are sufficiently addressed during the life of the mine and that no negative effect lasts beyond mine life.
- Mining operations affect the company's footprint. How the company is able to address or eliminate its footprint affects how stakeholders perceive them.
- Mining companies play a role in economic and social development. They and their stakeholders can work collaboratively to achieve social development.
- For CSR programs to become sustainable and effective, the community must be engaged. The communities would be the ones to continue the social programs. As such, ownership of sustainability initiatives is key.

SPECIAL REQUIREMENTS

a. Preparation:
b. Equipment and supplies required:
c. For the Room Set-up: LCD Projector and Screen; Laptop; Mic/lapel; Whiteboard and markers; USB for transferring the presentations; Recorder Room lay-out: Classroom style
d. Staff support required: Transfer of the ppt to the laptop and documentation of the event.

FIGURES AND FRAMEWORKS

Below are the figures and frameworks that could be used in this session. Please refer to the section on the List of Figures and Frameworks.

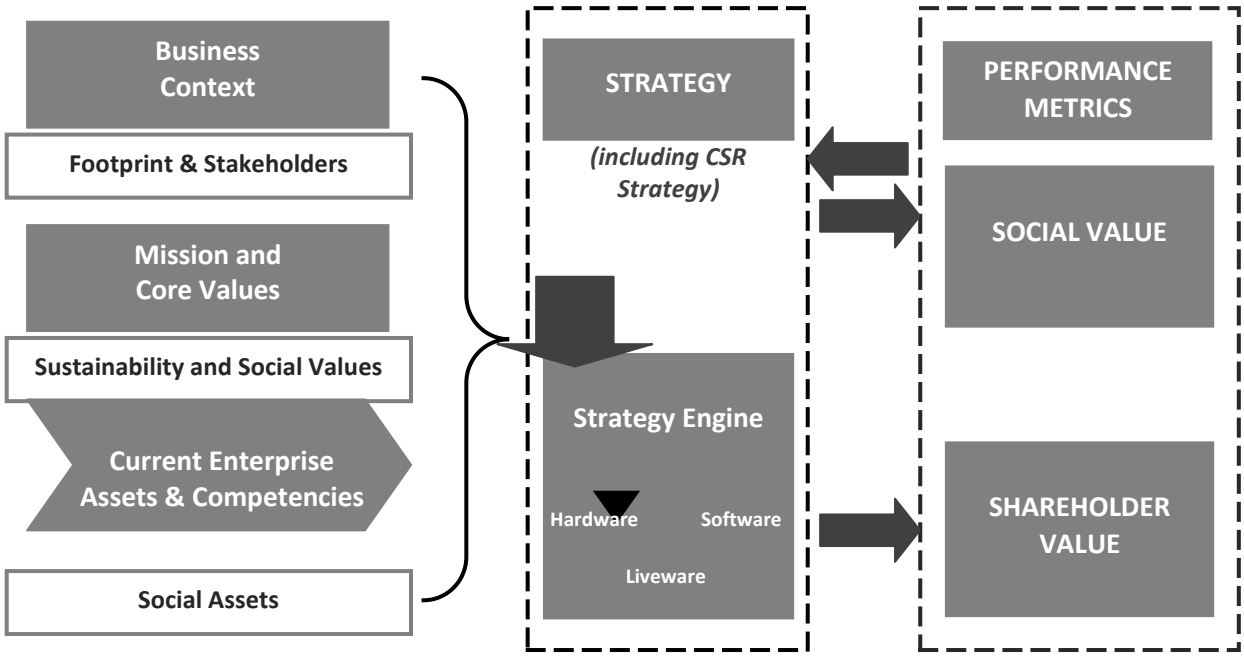
- Box 1: Business Case for Sustainable Development Framework
- Figure 9: Systems Frame
- Table 3: Mining Stages and Key Activities
- Figure 10: Mapping Footprint and Stakeholders in the Mine Life Cycle
- Table 4: Mining Stakeholders and Interests Across the Stages

Figure 11: Bridging Leadership Framework

LIST OF FIGURES AND FRAMEWORKS USED IN THE SESSION BRIEFS

1. CORPORATE SOCIAL RESPONSIBILITY

FIGURE 1: INTEGRATING SOCIAL PERFORMANCE

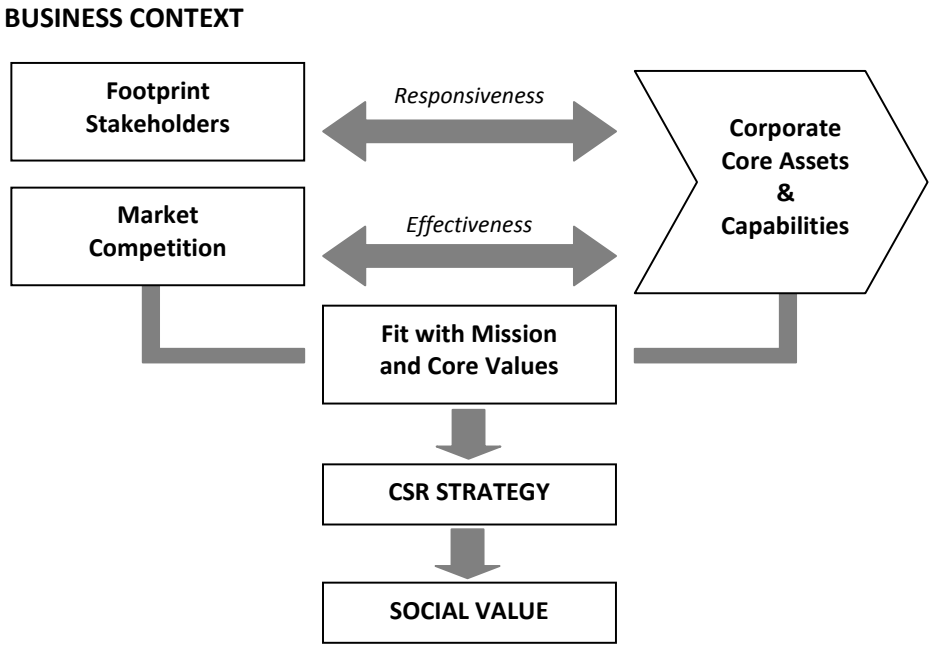


Herrera, M.B., Alarilla, M.I. and Uy, R.L. (2011). *Towards Strategic CSR: Aligning CSR with the Business and Embedding CSR in the Organization: A Manual for Practitioners*. Makati City: Asian Institute of Management.

FIGURE 2: LEVELS OF CSR RESPONSE FRAMEWORK

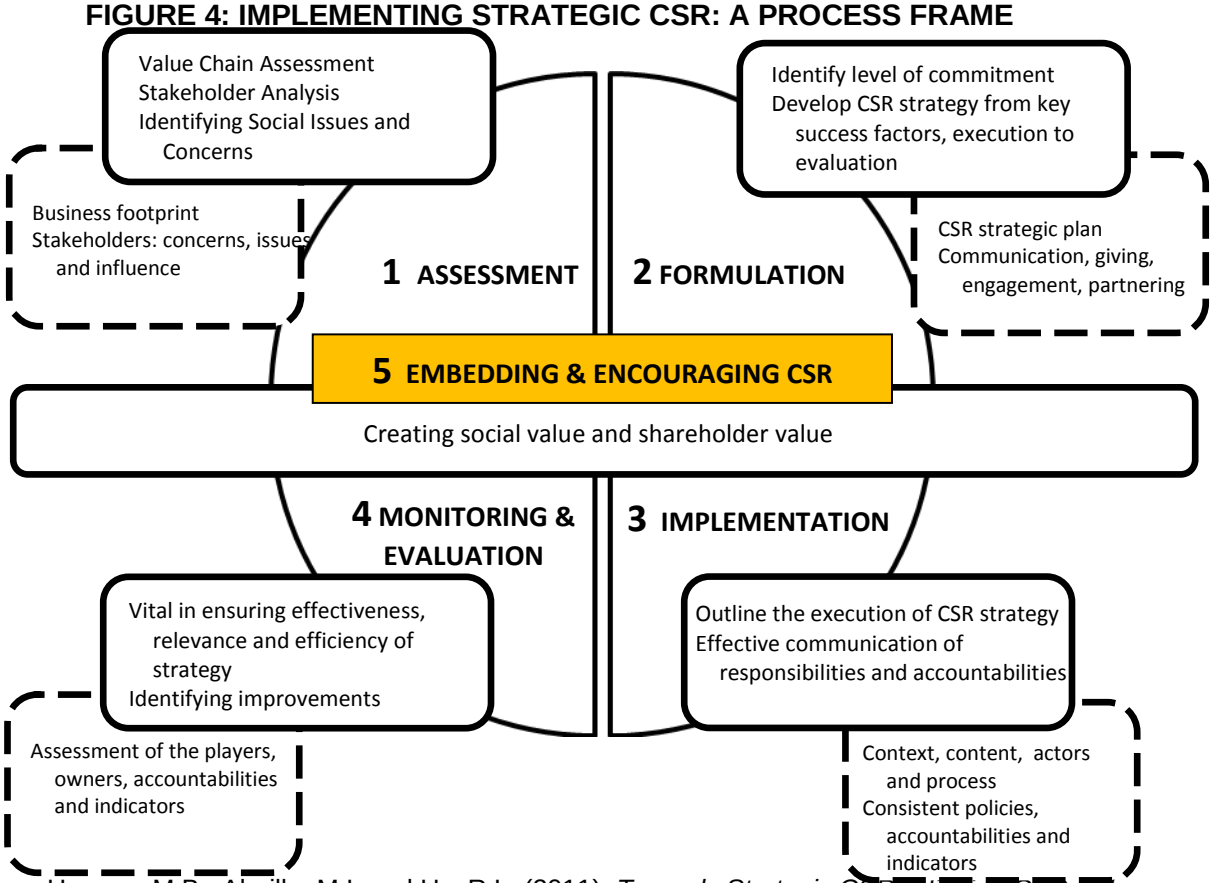
Source: Alfonso, 2005

FIGURE 3: DEVELOPING A CSR STRATEGY



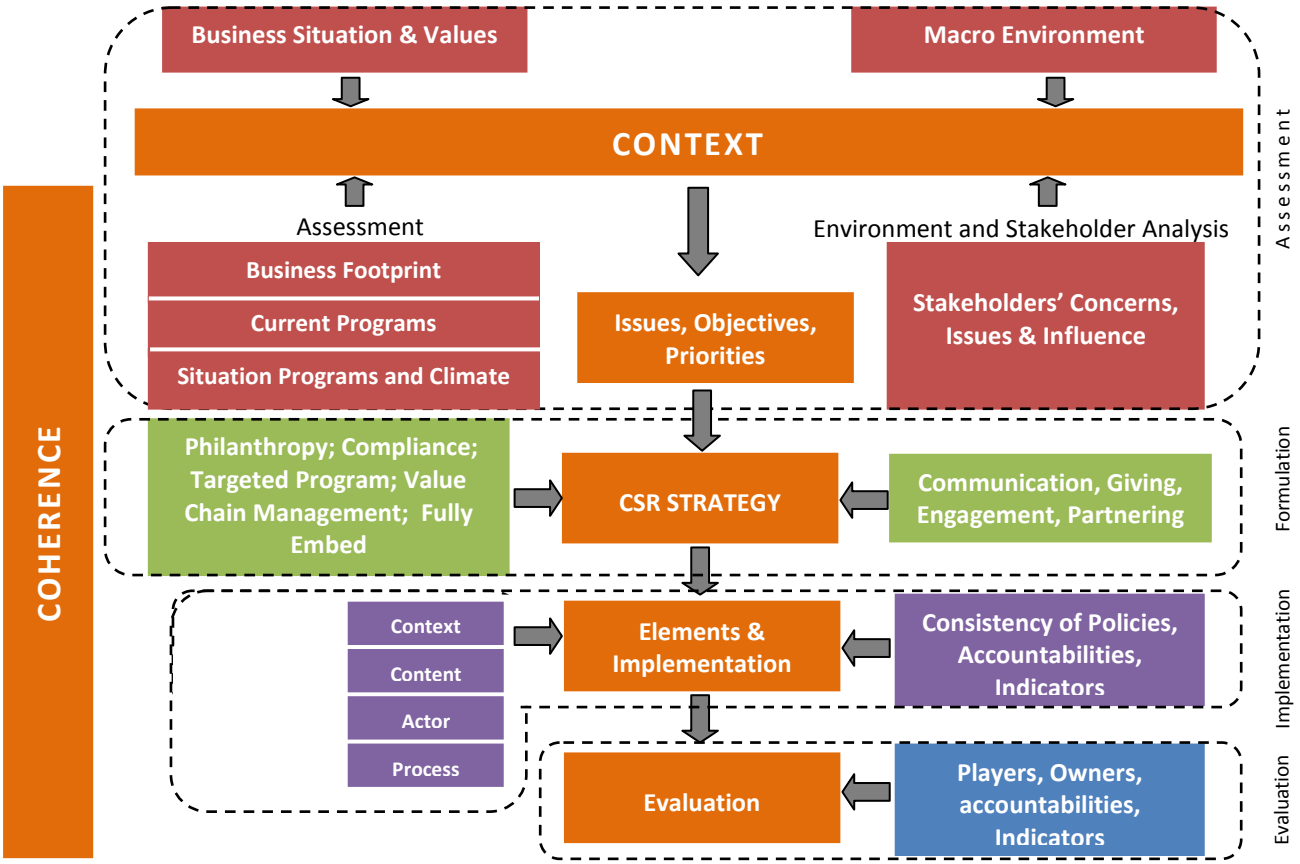
Source: Herrera, M.B., Alarilla, M.I. and Uy, R.L. (2011). *Towards Strategic CSR: Aligning CSR with the Business and Embedding CSR in the Organization: A Manual for Practitioners*. Makati City: Asian Institute of Management.

FIGURE 4: IMPLEMENTING STRATEGIC CSR: A PROCESS FRAME



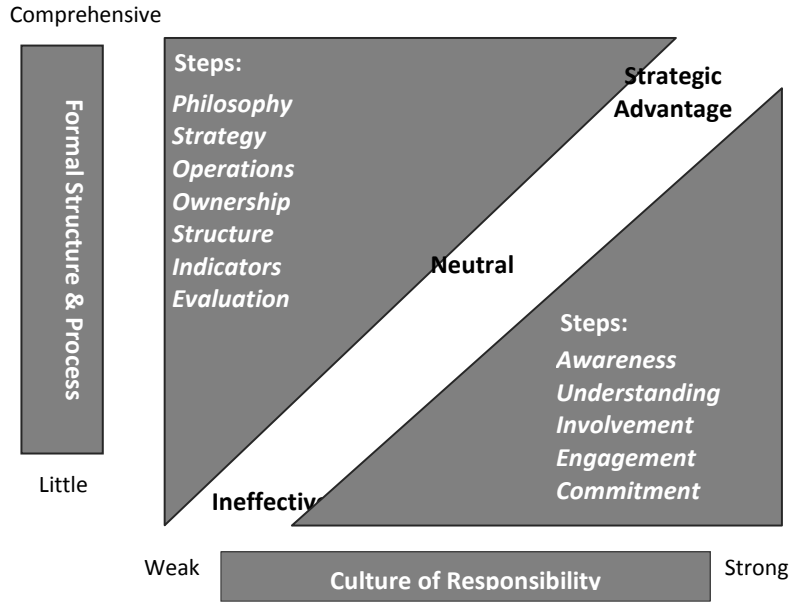
Source: Herrera, M.B., Alarilla, M.I. and Uy, R.L. (2011). *Towards Strategic CSR: Aligning CSR with the Business and Embedding CSR in the Organization: A Manual for Practitioners*. Makati City: Asian Institute of Management.

FIGURE 5: INTEGRATING AND ALIGNING CSR



Source: Herrera, M.B., Alarilla, M.I. and Uy, R.L. (2011). *Towards Strategic CSR: Aligning CSR with the Business and Embedding CSR in the Organization: A Manual for Practitioners*. Makati City: Asian Institute of Management.

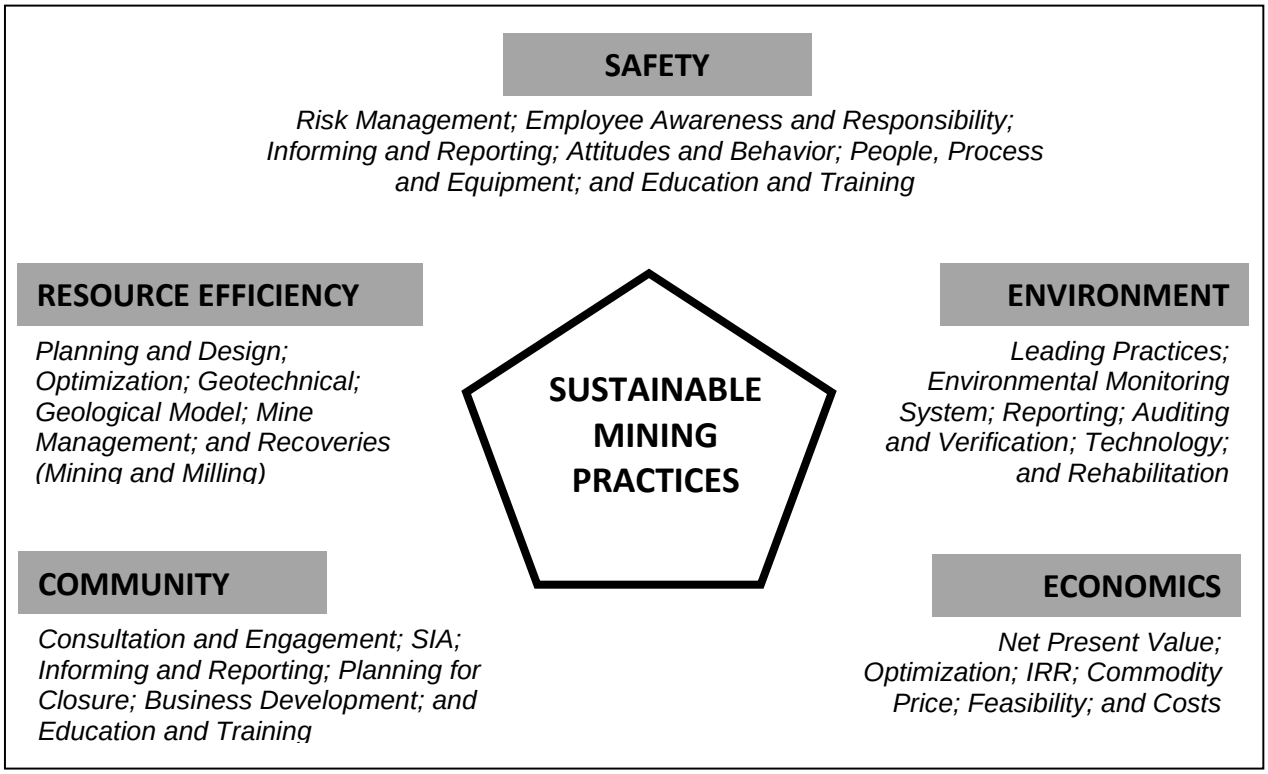
FIGURE 6: RESPONSIBLE BUSINESS



Source: Herrera, M.B., Alarilla, M.I. and Uy, R.L. (2011). *Towards Strategic CSR: Aligning CSR with the Business and Embedding CSR in the Organization: A Manual for Practitioners*. Makati City: Asian Institute of Management.

2. SUSTAINABLE MINING

FIGURE 7: SUSTAINABLE MINING PRACTICES FRAMEWORK



Source: Laurence, David. (2012). "The Mining Industry and its Sustainability Challenges." Presented during the APEC Training Program "CSR in the APEC Mining: Train the Trainers Program." June 2012, Legaspi City, Philippines.

BOX 1: BUSINESS CASE FOR SUSTAINABLE DEVELOPMENT FRAMEWORK

Improved mine management

- opportunities to optimise mine planning and operations during active mine life for efficient resource extraction and post-mining land use (for example reduction of double handling for waste materials and topsoil and reduced areas of land disturbance)
- identification of areas of high risk as priorities for ongoing research and remediation
- progressive rehabilitation provides opportunities for testing and improving the techniques adopted
- lower risk of regulatory non-compliance.

Improved stakeholder engagement n planning and decision-making

- more informed development of strategies and programs to address impacts, ideally as part of a community development approach from early in the mine life
- improved community receptiveness to future mining proposals
- enhanced public image and reputation.

Reduction of risks and liabilities

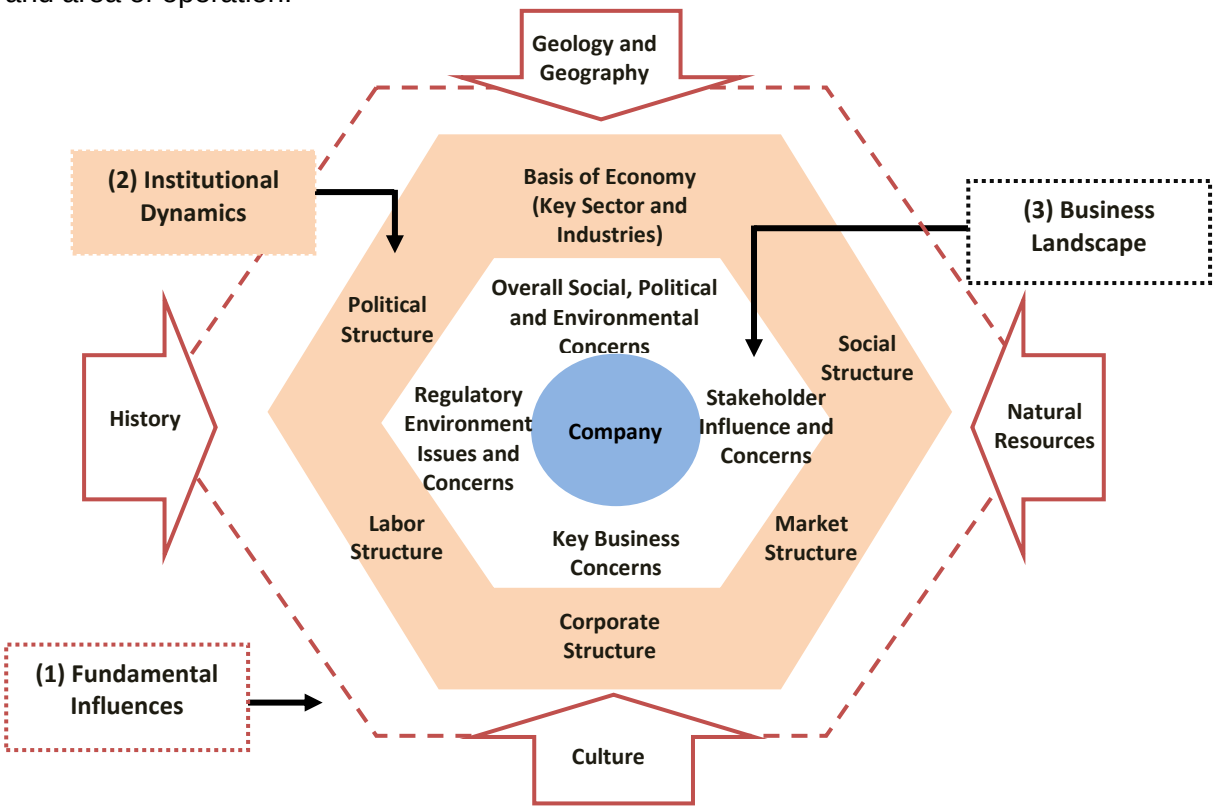
- assured financial and material provision for mine rehabilitation through more accurate estimation of mine rehabilitation costs
- reduction of exposure to contingent liabilities related to public safety and environmental hazards and risks.

This is an extract from, "Mine Rehabilitation."

3. ASSESSMENT: FOOTPRINT AND STAKEHOLDERS

FIGURE 8: THE ENVIRONMENT OF CSR: THE INFLUENCES (HEXAGON) FRAMEWORK

Macro concerns and trends such as local laws as well as industry standards and practices influence the company's operations. The framework below specifically considers formal and informal structures that affect and influence the company's operations based on its location and area of operation.



Source: Herrera, M.B., Alarilla, M.I. and Uy, R.L. (2011). *Towards Strategic CSR: Aligning CSR with the Business and Embedding CSR in the Organization: A Manual for Practitioners*. Makati City: Asian Institute of Management.

BOX 2: COMPONENTS OF VALUE CHAIN ANALYSIS

PROCESS refers to the key processes in the company's value chain—from sourcing of its raw materials, reporting to investors, manufacturing of products, and distribution of products to end consumers.
INPUT refers to the resources needed in completing the value chain process.
OUTPUT refers to the output created in the value chain process that is an important component to the succeeding processes.
BY-PRODUCT refers to the other products created in the value chain process that are not used as the main component. These may refer to waste products that affect the company's environmental footprint.
POSSIBLE ALTERNATIVE PROCESS, ALTERATIONS AND POTENTIAL IMPACT refer to alternative processes that might be used to replace or alter the current process. The reason for considering changes in the current process is to allow the manager to evaluate the effect of a change in process in such things as community or environmental impact. Alternative processes might produce less waste, less harmful waste or utilize less toxic ingredients. Of course, costs and productivity effects should be evaluated as well. . Adjustments to allow re-use of waste matter could also be considered.

LOCATION refers to the area where the value chain process takes place. This may be affected by the local laws and regulations on taxes, social demands, and environmental regulations.
ENVIRONMENTAL IMPACT refers to the business operation's effect on the environment. This may refer to waste discharges, water use/utilization, and land degradation.
STAKEHOLDER IMPACT refers to the business' operations impact on related stakeholders. The company's impact may include economic, social, cultural or political.
CSR INITIATIVES AND IMPACT refer to the current programs and activities and impact of CSR.
OPPORTUNITIES AND NEEDS refer to potential areas in the value chain process that can be improved through CSR.
Excerpt from the CSR Manual entitled, Towards Strategic CSR: Aligning CSR with the Business and Embedding CSR into the Organization (A Manual for Practitioners)

Source: Herrera, M.B., Alarilla, M.I. and Uy, R.L. (2011). *Towards Strategic CSR: Aligning CSR with the Business and Embedding CSR in the Organization: A Manual for Practitioners*. Makati City: Asian Institute of Management.

TABLE 1: EXAMPLES OF STAKEHOLDERS

Categories	Stakeholders
Primary Internal Stakeholders are those that are part of the company. These include shareholders and employees.	Shareholders and Employees
Primary External Stakeholders stakeholders are those individuals or organizations that are part of the company's supply chain	Suppliers, Distributors and Consumers
Secondary Stakeholders are those that are not directly linked to the corporate supply chain but are nevertheless affected by or have an interest in the firm's operations	Host community and Environment
Moderating or Mediating Stakeholders serve as a proxy for general society, indirect and direct stakeholders	Church, NGOs, Media and Government
Excerpt from the CSR Manual entitled, Towards Strategic CSR: Aligning CSR with the Business and Embedding CSR into the Organization (A Manual for Practitioners)	

Source: Herrera, M.B., Alarilla, M.I. and Uy, R.L. (2011). *Towards Strategic CSR: Aligning CSR with the Business and Embedding CSR in the Organization: A Manual for Practitioners*. Makati City: Asian Institute of Management.

TABLE 2: LIST OF STAKEHOLDERS AND THEIR CONCERNS

STAKEHOLDERS	CONCERNS
Investors	Financial Return, Responsible Behavior
Customers	Safety, Quality, Availability, Fair Pricing
Employees	Working Conditions, Work-life balance, Fairness
Suppliers	Fair Pricing
Community	Safety, Civic or Financial Support
Society	Varying including Safety, Fair Dealing
Environment	Ecological footprint, Effect on Habitats, Safety
Government	Safety, Fair Dealing, Footprint
Media	Safety, Fair Dealing, Footprint
Non-profits	Social and Environmental Footprint, Primarily Mission-Related

Source: Herrera, Maria Elena. (2011) "Metrics for Evaluating Social Values." Presentation during the Asian Forum on Corporate Social Responsibility, October 2011, held in Manila, Philippines

BOX 3: KEY QUESTIONS IN ANALYZING STAKEHOLDERS

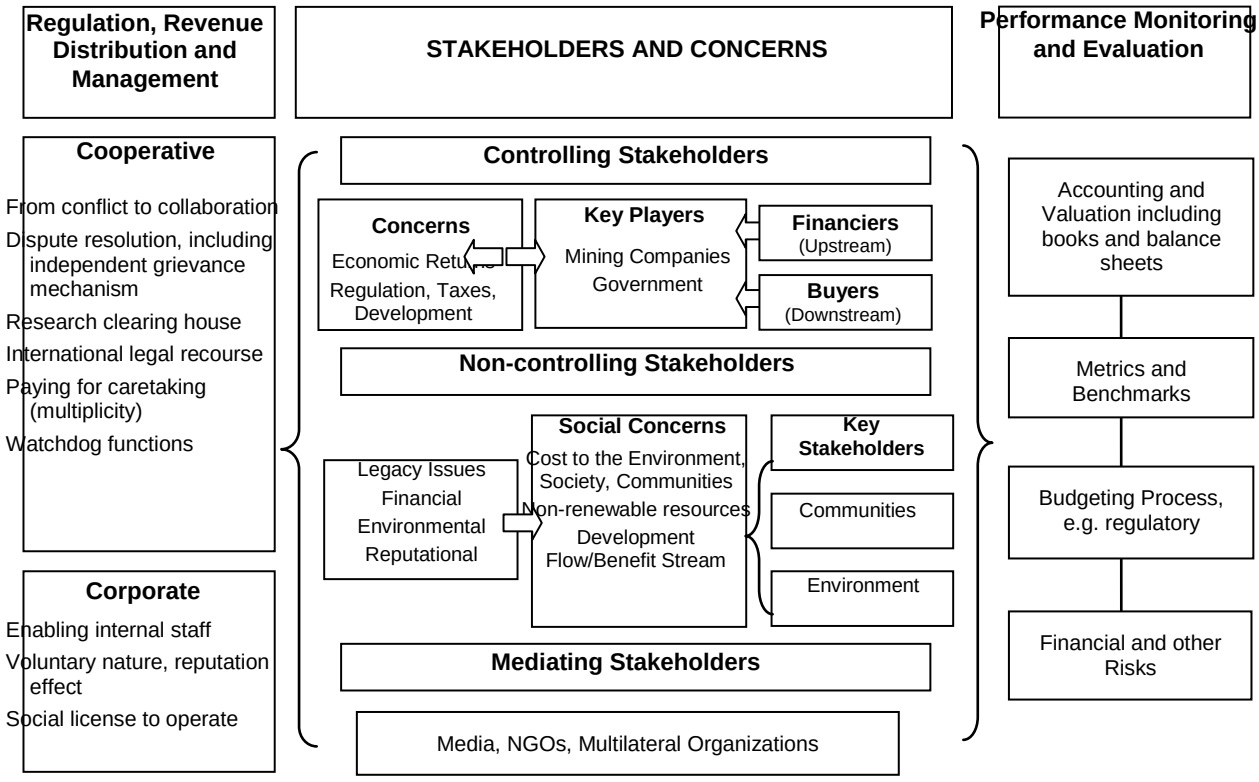
- What are their objectives? What do they want to accomplish?
- What is their level of interest?
- What is their level of influence?
- What are their assets and competencies?
- What are their impacts on the company's operations and local community?
- What are their perceptions about the company and the company's operations?
- What would we like from them?
- How are we performing based on their interests?
- How do other companies deal with them at the local and industry level?

Excerpt from the CSR Manual entitled, Towards Strategic CSR: Aligning CSR with the Business and Embedding CSR into the Organization (A Manual for Practitioners)

Source: Herrera, M.B., Alarilla, M.I. and Uy, R.L. (2011). *Towards Strategic CSR: Aligning CSR with the Business and Embedding CSR in the Organization: A Manual for Practitioners*. Makati City: Asian Institute of Management.

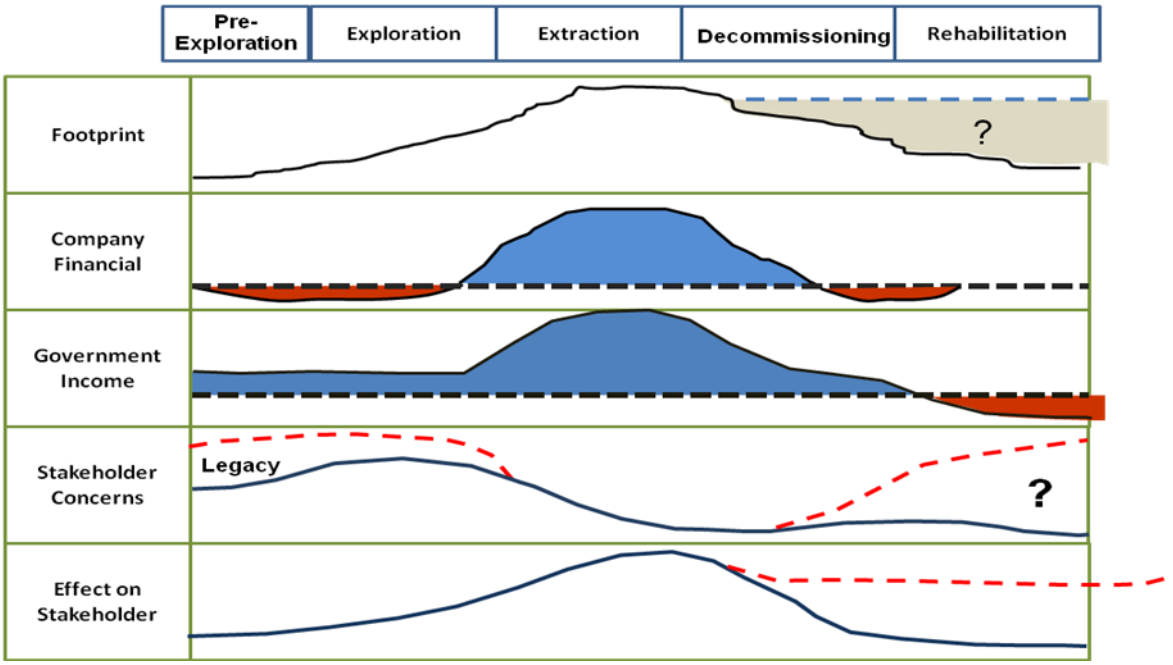
4. MINING AND CSR

FIGURE 9: SYSTEMS FRAME



Source: Herrera, M.B., Alarilla, M.I., Decena, M.S. and de Jesus, M.C. (2011). Corporate Social Responsibility in the APEC Mining Sector (Educational Framework). In APEC Secretariat, *CSR in the APEC Mining Sector*. APEC Secretariat.

FIGURE 10: MAPPING FOOTPRINT AND STAKEHOLDERS IN THE MINE LIFE CYCLE



Source: Herrera, M.B., Alarilla, M.I., Decena, M.S. and de Jesus, M.C. (2011). Corporate Social Responsibility in the APEC Mining Sector (Educational Framework). In APEC Secretariat, *CSR in the APEC Mining Sector*. APEC Secretariat.

TABLE 3: MINING STAGES AND KEY ACTIVITIES

	Pre-Exploration	Exploration and Feasibility *(Includes Planning and Designing)*	Operations *(Includes construction and Extraction)*	Decommissioning and Rehabilitation
Operating Activities	Secure funding; Establish preliminary feasibility report	Evaluation of commercial viability of mineral resources; Designing the facilities	Construction of mine site and auxiliary facilities	Removal of infrastructure; Rehabilitation of mine site; Orderly conversion or Dismantling of institutional entities
Regulatory and Compliance	Application for government permits	Application government licenses and certificates; Construction plan that takes into account mitigating measures that need to be in place	Maintenance of regular permits and compliance with reporting requirements	Monitoring of closure activities to ensure they meet government standards; Secure of clearance and certificates
General CSR	Assessment of land use and ownership	Completion of environmental and social impact assessment; Designing the environmental, social and economic development plan; Formulation of exit strategy	Monitoring of mine facilities, external situation and mining operations impact; Updating the decommissioning and rehabilitation plan	Rehabilitation of mined out areas and gradual exit of socio-eco programs
Environment	Preliminary environmental impact analysis	Development of environment monitoring and impact management program	Continuous monitoring of environmental impact; Progressive rehabilitation	Implementation of environmental rehabilitation plan
Societal	Stakeholder analysis and initial stakeholder engagement	Secure SLTO; Community relocation and resettlement initiatives	Continuous monitoring of societal impact; Implementation of socio-eco programs	Progressive exit from socio-economic programs; Final review and planning with stakeholders
Important Notes	The company needs to negotiate with surface claimants of the land to be able to proceed with exploration activities	The results of the initial feasibility study are used in designing the mine. The final design of the mine results in the initial business plan for the mine.	Community development activities must be started early in order to ensure the sustainability of the community post mining operations.	At the end of a successful decommissioning and rehabilitation, the community is ready to implement the new land use and economic development plans without further assistance from the mining company.
In all the stages, the key activities include the following: Compliance to regulation, monitoring the company's impact, stakeholder engagement, community development programs, and environmental sustainability initiatives.				

Source: Herrera, 2012

TABLE 4: MINING STAKEHOLDERS AND INTERESTS ACROSS THE MINING STAGES

PRE-EXPLORATION	EXPLORATION	OPERATIONS	DECOMMISSIONING AND REHABILITATION
Government			
Compliance to local laws Profit Sharing		Compliance to environmental laws; Payment of Taxes	
Investors			
Expected mineral deposits to be mined "sunk cost"	Actual minerals present in the mine site; Cost of operations (i.e. drilling and construction of mine site)	Cost of operations; Prices of minerals; Efficiency in extracting minerals; Safety and standards (quality control)	Cost of reclamation and rehabilitation Profits from the mining operation
Direct Impact Community			
Information Campaign; Social investments; Profit sharing agreements; Company's ability to comply with local laws;	Information Campaign; Social Investments; Employment; Social License to operate (SLTO); Resettlement; Land Use Payments; Social ills	Information Campaign Social investments Employment SLTO; Profit Sharing; Social Ills; Boom town effect	Continued Livelihood; Rehabilitation of the Mine Site (i.e. impacted areas); Boom town effect
Indigenous People			
Identifying of Mapping of IPs; Protection of culture and ancestral domain	Protection of culture and ancestral domain; FPIC; Resettlement; Employment; Community programs SLTO	Protection of culture Employment Community programs; Livelihood; Environmental Protection; SLTO	Continued livelihood; restoring of ancestral domain (if possible)
Critical Stakeholders (Media, NGO, Socio-civic Orgs, Church)			
Information Dissemination; Environmental Protection; Protection of Human Rights and IPs; Social Ills			
Employees			
High wage; comfortable workplace environment; Health and Safety			Possible employment opportunities
Environment			
Land disruption and environmental Degradation (i.e. drilling of mineral samples)		Pollution generated by mineral processing, treatment, storage and transportation	Restoring of the ecosystem
Armed Groups			
Land agreement passage; payment of revolutionary taxes; kidnapping of mine employees; extortion; arson; destruction of mine facilities and equipment			

5. PERFORMANCE METRICS AND EVALUATION

SLIDES ON METRICS

USEFUL METRICS
Relevant
Meaningful
Actionable
Credible

CHARACTERISTICS OF METRICS

- Balanced (Kaplan and Norton, 1992)
- Causal linkages

METRIC SYSTEM

- Complete, balanced, relevant, and clear
- Fully embodies the causal linkages of business strategy.
- Action-ability

The metrics in the system must be actionable and each set of metrics must have a clear owner.
(Herrera and Decena, 2007)

METRICS FOR CORPORATE SOCIAL RESPONSIBILITY

- The true challenge for those involved in developing CSR metrics is that of embedding CSR within a business model that has financial value creation as its end goal.

METRICS TO ADDRESS TWO USERS

Company Management	External Stakeholders
• How the company is performing with respect to CSR • How that performance affects the company's performance in other business areas (and vice versa); • Help guide management decisions, including policy –setting.	• Company's social and environmental footprint, • How corporate activities shape those footprints • What capabilities the company has for shaping those footprints.

These slides are based on the journal article of Herrera, M.B. entitled, "Some Approaches to Developing Useful CSR Metrics" in the Journal of Asian Management (Special Issue on Corporate Social Responsibility). Volume 01, Issue 01.

TABLE 5: GRI AND ISO 26000 MAPPING

GRI	ISO 26000	REMARK
ENVIRONMENTAL. Materials; Energy; Water; Biodiversity; Emissions, Effluents and Waste; Products and Services; Compliance Transport	**ENVIRONMENT**. Prevention of pollution; Sustainable resource use; Climate change mitigation and adaptation; Protection of the environment, biodiversity and restoration of natural habitats	Virtually Identical
HUMAN RIGHTS. Investment and Procurement Practices; Non-discrimination; Freedom of Association and Collective Bargaining; Child Labor; Forced and Compulsory Labor; Security Practices; Indigenous Rights	**HUMAN RIGHTS.** Due diligence; Human rights risk situations; Avoidance of complicity; Resolving grievances; Discrimination and vulnerable groups; Civil and political rights; Economic, social and cultural rights; Fundamental principles and rights at work	Virtually Identical
LABOR PRACTICES AND DECENT WORK. Employment; Labor/Management Relations; Occupational Health and Safety; Training and Education; Diversity and Equal Opportunity	**LABOR PRACTICES**. Employment and employment relationships; Conditions of work and social protection; Social dialogue; Health and safety at work; Human development and training in the workplace	Virtually Identical
PRODUCT RESPONSIBILITY. Customer Health and Safety; Product and Service Labeling; Marketing Communications; Customer Privacy; Compliance	**CONSUMER.** Fair marketing, factual and unbiased information and fair contractual practices**;** Protecting consumers' health and safety**;** Sustainable consumption**;** Consumer service, support and compliant and dispute resolution**;** Consumer data protection and privacy**;** Access to essential services**;** Education awareness	Very Similar
SOCIETY. Local Community; Corruption; Public Policy; Anti-competitive Behavior; Compliance	**COMMUNITY INVOLVEMENT AND DEVELOPMENT.**** Community involvement; Education and culture; Employment creation and skills development; Technology development and access; Wealth and income creation; Health; Social investment **FAIR OPERATING PRACTICES.** Anti-corruption; Responsible political involvement; Fair competition; Promoting social responsibility in the value chain; Respect for property rights	Two ISO factors roughly map onto the GRI SOCIETY category.

ECONOMIC. Economic Performance; Market Presence; Indirect Economic Impacts	** Indirect economic impact would be part of community development	As ISO 26000 concentrates on social concerns, there is no precise equivalent for economic reporting.
Source: GRI Website. "GRI G3 and G3.1 Update – Comparison Sheet." <http://www.globalreporting.org/NR/rdonlyres/D356E15F-951F-42BC-8AB7-4A63621BC0DE/0/G31_ComparisonSheet.pdf> (20 September 2011) and ISO Website. "ISO 26000 – Social Responsibility: Discovering ISO 26000." <http://www.iso.org/iso/iso_catalogue/management_and_leadership_standards/social_responsibility/sr_discovering_iso26000.htm#std-table2> (19 September 2011).		

Herrera, M.B., Alarilla, M.I. and Uy, R.L. (2011). *Towards Strategic CSR: Aligning CSR with the Business and Embedding CSR in the Organization: A Manual for Practitioners*. Makati City: Asian Institute of Management.

6. KEY MESSAGES OF THE DIFFERENT MINING STAGES

BOX 4: PRE-EXPLORATION AND EXPLORATION STAGE

- A focus on community engagement and support during this stage will pay dividends for any future operation.
- If the community engagement process is flawed, the approval to mine process will be delayed or threatened.
- Cross-cultural skills are essential in the early phases of a potential mining project.
- Mine planning and design needs to integrate social, environmental as well as economic considerations.
- Mine closure planning needs to begin in the early stages.
- The earlier the life of mine planning begins, the fewer the problems later.
- EIA and SIA studies should be completed in parallel with prefeasibility and later feasibility studies
- effectively applying risk management principles early lays the foundation for good relationships throughout the whole mine life cycle
- baseline studies need to be undertaken for – biodiversity – noise, air quality – water
- the potential for acid drainage needs to be assessed as early as possible and mitigation strategies planned

This is an extract from the Handbook entitled, "A Guide to Leading Practice Sustainable Development in Mining ".

BOX 5: CONSTRUCTION AND DEVELOPMENT PHASE

- Workforce levels and surface disturbance can peak therefore the social and environmental impact can be higher than any other stage
- When risk management is not undertaken thoroughly, it can lead to major flow-on impacts on an individual mine, company and the mining industry
- Sustainability requires that the complex relationships between various risks be well understood, especially the potential for links between environmental, social, political, economic and reputation risks
- Community engagement activities should be a continual (daily) focus of senior management in this phase
- Contractors and subcontractors will likely outnumber company employees and require

continual management attention if sustainability objectives are to be achieved

- Opportunities for Indigenous participation in the workforce should be pursued
- Planning and development for an effective monitoring framework should occur as early as possible in a project's life cycle

This is an excerpt from the Handbook entitled, "A Guide to Leading Practice Sustainable Development in Mining ".

BOX 6: MINING AND PROCESSING OPERATIONS

- the operations phase is the most challenging as far as sustainability is concerned as mines can have longevities of 50 or more years
- planning decisions for sustainability made in the development phases impact either positively or negatively in the operations phase
- systems need to be developed and reviewed throughout the mine life particularly environmental management systems and community engagement initiatives
- risk management techniques are essential in managing sustainability impacts during operations
- a focus on materials stewardship particularly in the waste stream will pay sustainable dividends
- companies are increasingly including the local community in managing the impact on biodiversity
- water management continues to be a major issue for mine management and eliminating the acid mine drainage risk is at the forefront of research
- tailings disposal techniques continue to evolve such as in in-pit or thickened discharge methods
- the safe storage and handling of cyanide and other hazardous substances is now well established with much guidance material available for mine management

This is an excerpt from the Handbook entitled, "A Guide to Leading Practice Sustainable Development in Mining ".

BOX 7: CLOSURE AND REHABILITATION PHASE

- All mines close and many close prematurely. Mine management needs to develop and implement mine closure planning. Taking a more integrated approach to mine closure planning, and doing it earlier, can achieve effective mine closure and completion, and ameliorate the negative effects of unexpected or unplanned closures.
- Community engagement at the earliest possible time is essential. The goal should be community ownership as the community will inherit the project eventually. Community liaison or advisory groups established specifically for the mining project can help the operation focus its engagement program.
- Rehabilitation planning and implementation need to take place early and progressively throughout the life of the mine. Leading practice techniques can provide guidance for successful landform design, topsoil usage and revegetation outcomes.
- Costing for closure and rehabilitation is essential and tools are available to calculate realistic costs.
- Risks (to company reputation etc) are significant and are long term in nature and companies can expect to have rehabilitation and closure liabilities long after production has ceased. Quantitative and qualitative risk assessment techniques to demonstrate to the community and regulators that closure issues have been identified and an appropriate security deposit can be calculated.
- Leading practice biodiversity management goes beyond minimizing long-term impacts from operations. It identifies opportunities for improvement in the lease and adjacent areas by

introducing innovative and sustainable land management practices.
- Leading practice techniques during the operation of the mine will reduce the potential for long term issues associated with acid mine drainage.

This is an excerpt from the Handbook entitled, “A Guide to Leading Practice Sustainable Development in Mining “.

BOX 8: DESIGN AND IMPLEMENTATION OF PERFORMANCE MONITORING

Monitoring: Design

- Planning for monitoring over the life of the mine is most cost-effectively based on assessment of the key environmental and stakeholder risks, and changes to the community asset base, for each phase of operations.
- Regular review of the risks and associated monitoring is needed to ensure objectives are met and findings are used to inform improved management decisions and practices.
- Monitoring is the means by which mining companies and stakeholders can assess the effectiveness of management measures, verify or adjust predictions made early in the project, and develop improved management practices.
- Leading practice mining project monitoring programs comprise environmental, social, cultural and socioeconomic aspects, in addition to routine operational monitoring requirements.

Monitoring: Implementation

- Leading practice monitoring is essential for achieving consistent good performance outcomes and continuous improvement.
- Community participation is a decisive element in the design and implementation of leading practice socioeconomic and environmental monitoring.
- Consistent, accessible and transparent data management systems are critical for ensuring quality assurance and quality control standards are maintained and data can be utilised to the maximum advantage of all involved with, or affected by, the project.
- Monitoring, auditing and research all play a critical role in the development of achievable completion criteria.
- Leading practice monitoring systems are regularly reviewed and revised to take into account changes in mine planning, improvements in monitoring technology, and other aspects.
- Reporting systems for monitoring and auditing must be accurate and timely, and address the information needs of stakeholders. Feedback from monitoring programs should inform operational planning and decision making.

This is an extract from, “Evaluating Performance: Monitoring and Auditing.”

BOX 9: AUDITING

- Auditing is a risk management tool that can be used to review environmental and social performance against agreed audit criteria.
- Auditing is used to monitor compliance with regulatory requirements and corporate or external policies, standards and procedures.
- Auditing is a critical stage in the continuous improvement loop for sustainable management.
- There are a number of different types of environmental and social audits, the selection of which will depend on the audit objectives.
- Auditing of monitoring programs enables tracking of progress toward the achievement of environmental and social objectives.

This is an extract from, “Evaluating Performance: Monitoring and Auditing.”

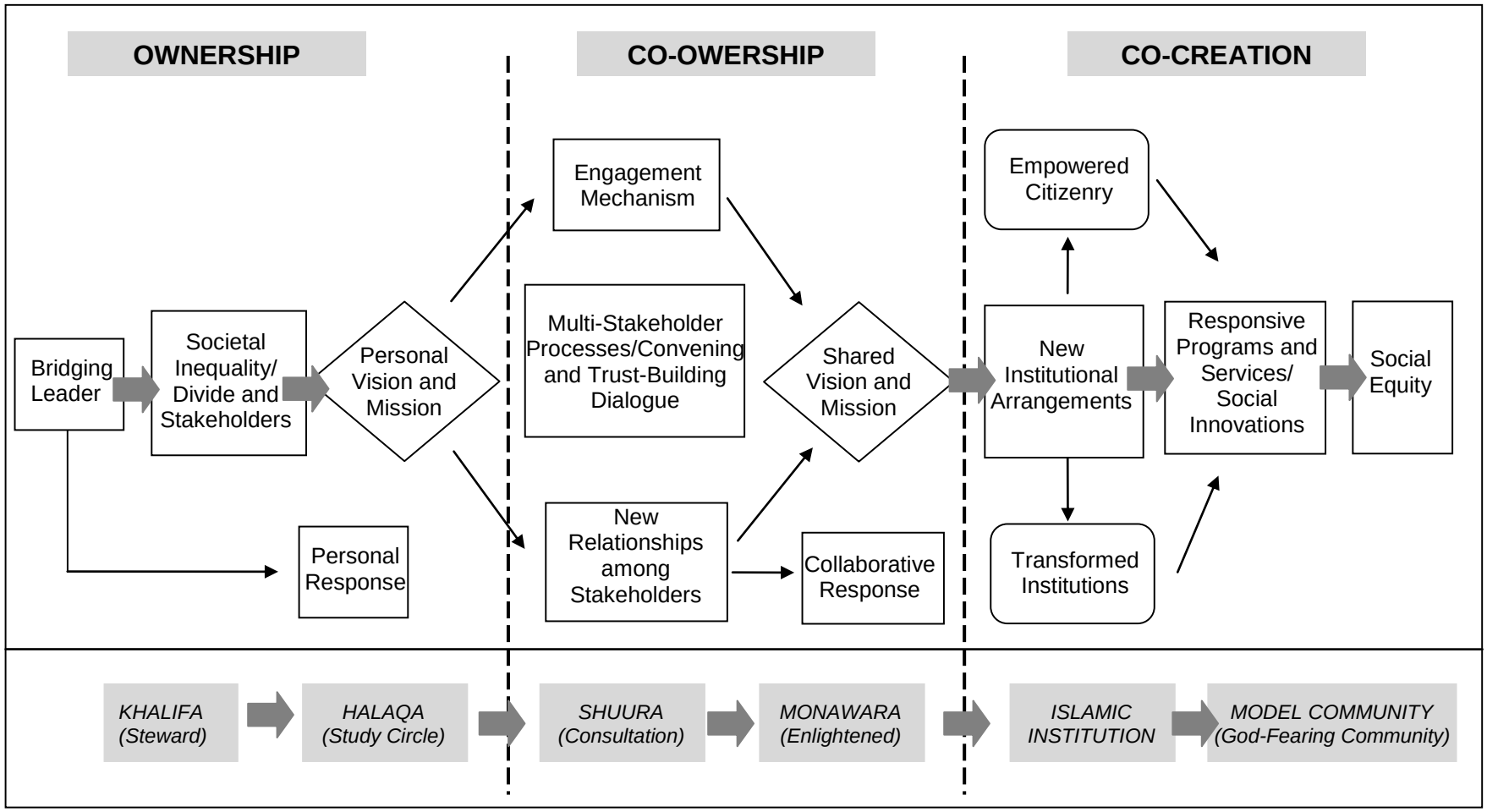
TABLE 7: COMMUNITY ENGAGEMENT AND DEVELOPMENT DURING THE PROJECT DEVELOPMENT AND CONSTRUCTION

Project Stage	Examples of Community Engagement Activities	Examples of Community Development Activities
Project Development	Engaging in further discussion and negotiation for the purposes of: - ongoing permission for access to land - fulfilling the obligations of land use and other agreements - identifying cultural issues that may extend beyond exploration such as mapping exclusion zones, active protection of sites. Providing information regarding project development particularly when project development is uncertain. Involving the community in baseline monitoring of environmental and socio-economic and cultural aspects. Establishing consultative forums and structures (such as community liaison committees).	Undertaking community needs analyses and baseline studies, including understanding community capacity to cope with change, and the strength of community networks and institutions. In collaboration with key stakeholders, planning the company's community development programs which may include: - establishing trusts and foundations to manage royalties, and/or corporate community contributions - supporting and/or contributing to improvements in community infrastructure (such as schools, housing) - outreach programs for marginalized groups - building the capacity of local and Indigenous businesses to provide products or services to the facility - building the capacity of local and Indigenous people to gain direct employment at the facility. - liaising with governments about regional development planning.
Construction	Understanding and addressing community concerns about the environmental and social impacts of large-scale construction activity. Dealing with community expectations about employment and economic opportunities in the construction phase and beyond. Liaising with near neighbors to manage amenity and access issues.	Implementing programs to help integrate employees and their families into the community. Partnering and collaborating with government and other organizations to ensure the delivery of improved services (such as childcare, education, and housing) to communities impacted by construction activity. Providing employment, training and business opportunities for local people in the construction phase and beyond.

Source: Australian Government- Department of Resources, Energy and Tourism. (July 2011). *A Guide to Leading Practice Sustainable Development in Mining*. Part of the Leading Practice Sustainable development Program for the Mining Industry. Accessed at http://www.ret.gov.au/resources/Documents/LPSDP/guideLPSD.pdf

7. STAKEHODLER ENGAGEMENT FRAMEWORK

FIGURE 11: BRIDGING LEADERSHIP FRAMEWORK



Source: Confessor, N.. (2012). *People: Co-creating a Company's/Community's Compelling Future (Strategies: A Company's Public Narrative)*. A presentation at the CSR in APEC Mining: Train the Trainers Program, June 2012, Legaspi City, Albay

Teaching Notes

AUSTRALIA ECONOMY REPORT
TEACHING NOTE

ABSTRACT

The Australian Mining Industry Case Study maps the development of mining in one of the most highly-developed mining industries in the world and examines the need to balance different stakeholder concerns in a complex operating environment. Because of Australia's long history with mining, and the significant contributions of the sector to the economy, mining is a key source of growth and employment. The sector accounts for about 10% of Australia's gross domestic product (2011-2012) and employs over 263,300 Australians.

The sector also contributed about US$7 billion in taxes (2009-2010) and invested some US$10 million in primary, secondary and tertiary education. But these gains must be balanced against the harm caused by mining, such as environmental damage and waste production. Mining companies must also deal with the opposition to their operations, and the challenge of sustainability as high-grade ores get depleted and operating costs soar due to higher expense needed to process lower-grade ores. The industry must address these challenges and ensure sustainability through responsible mining, not just through environmental and social initiatives, but also through transparency and accountability in governance.

Key Words: Corporate Social Responsibility, Development of the Mining Industry

Economy: Australia

PRIMARY TOPIC AND USE

The case discusses the development on mining in Australia and discusses stakeholder concerns for participants use in applying Herrera et al's CSR influences framework. The framework integrates institutional dynamics, fundamental influences, and the business landscape and acts as a useful tool in helping the company formulate a comprehensive CSR strategy.

The case and this teaching note were created for the APEC Human Resources Development Working Group Capacity building network, and are meant to be used in the course discussing CSR in the APEC mining sector. This course is primarily for mining professionals, and people who work in NGOs and government agencies that deal with the mining industry. Course participants are all expected to have a working background in and basic knowledge of the mining industry.

LEARNING OBJECTIVES

At the end of the case discussion, participants should be able to:

1. Using the recommended CSR analysis framework, define the context of the case, in terms of both the institutional dynamics and the business environment, and identify the key issues in the mining industry in Australia.

2. Identify the positive and negative effects of mining on the economy, the environment, and society.

3. Identify the various stakeholders and their interests and key concerns as well as their expectations from the various other sectors involved.

4. Identify the roles and responsibilities of the different stakeholders in maximizing the gains from mining while mitigating or minimizing its negative impact.

5. Provide an understanding of the importance of transparency and governance in developing credibility and support for Australian mining companies.

ASSIGNED STUDY QUESTIONS

Guide questions and recommended discussion time (90 minute class):

1. Identify the key stakeholders in the Australian mining industry:
    a. What is the role of the government?
    b. What about other stakeholders?

2. How do the principles of Governance, Transparency, Accountability, and Stakeholders apply to the role of government in addressing the concerns in the mining sector?

3. Identify the fundamental factors influencing the Australian mining industry
    a. What are the natural resources mined in the country?
    b. How has mining affected Australia's history?
    c. Based on your knowledge (or through internet research), how do Australian culture, geology and geography interplay with the other two factors in influencing the mining industry?

4. Evaluate the institutional factors influencing the Australian mining industry
    a. How important is mining to the Australian economy?
    b. What is the role of government (Federal Government vs State Territories) in the Australian mining industry? What are the mining-related laws? Who enforces the legislation, and who receives the gains from mining operations?
    c. What is the role of Australian resources and energy commodities in the country's balance of trade?
    d. How has the demand and supply of mining engineers and employees affected the state of Australian mining industry?
    e. Based on your knowledge (or through internet research), what do you know about Australia's social structure and corporate structure?

5. Discuss the factors in the business landscape of the Australian mining industry
    a. What are the key mining laws in Australia?

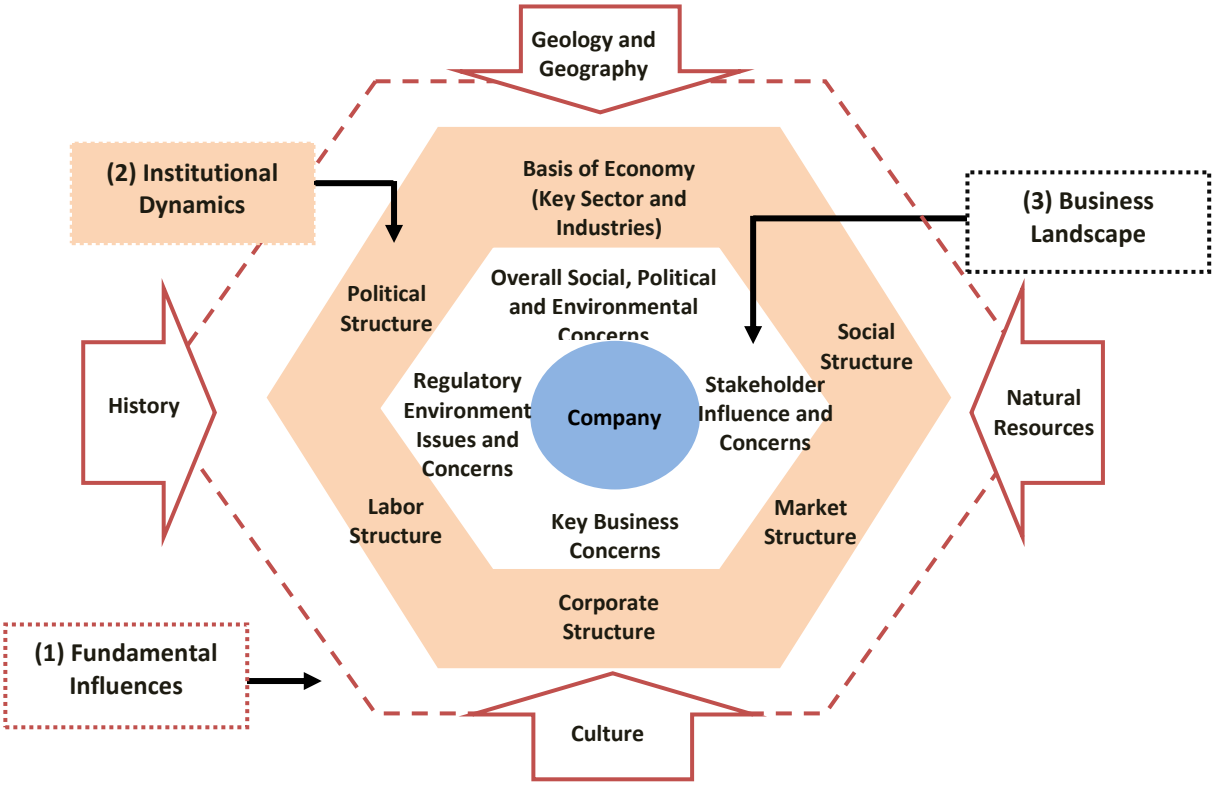
b. How does the government promote sustainable development?
c. Based on your knowledge (or through internet research),what are the key business concerns of mining companies? What are the key concerns of stakeholders? What are the key social, political, and environmental concerns?

Before class, the facilitator might ask the students to conduct an internet research on the other factors (not included in the Australia economy report) that may affect the Australian mining industry. The facilitator might also want to write a supplementary reading that will include the missing factors that affect the Australian mining industry.

THEORY: INFLUENCES HEXAGON FRAMEWORK[1]

Macro concerns and trends such as local laws as well as industry standards and practices influence the company's operations. The Influences (Hexagon) Framework specifically considers formal and informal structures that affect and influence the company's operations based on its location and area of operation.

The Environment of CSR: The Influences (Hexagon) Framework



The Framework is divided into three pillars—Fundamental Influences, Institutional Dynamics, and Business Landscape. The Fundamental Influences, outer most layer, refers to the traditional and environmental factors that affect CSR practice. This includes history, culture, natural resources, and geology and geography. These four factors influence the institutional dynamics and structures within a location. Since these factors are relatively permanent, it is difficult for the company to change or influence these factors. Culture and history can only be changed through time. Natural resources, together with geology and geography, can be influenced by companies through its operations—this is particularly true for those in the

[1] This section is an excerpt from the 2013 RVR publication, "Towards Strategic CSR: Aligning CSR with the Business and Embedding CSR into the Organization (A Manual for Practitioners)-3rd ed."

heavy footprint industries. The Fundamental Influences are important when formulating CSR strategies and programs. Culture and history helps in understanding the mindset and perception of the local community and its stakeholders; while natural resources and geology and geography help in identifying possible threats and opportunities in relation to environmental protection or potential for economic impact and country partnering.

The Institutional Dynamics, the heart of the Framework, refers to the formal and informal structures and institutions. These factors are based on the formal and informal agreements of members of society. These include the basis of economy, social structure, market structure, corporate structure and culture, labor structure, and political structure. These factors can affect corporate behavior through regulations, policies, and laws at the global, national and local levels. These institutions can provide implicit and explicit guidelines and standards for corporate behavior, e.g. these include policies concerning labor, environmental policies, corporate governance and accountability, reporting, manufacturing practices, as well as consumer and public safety.

Understanding the Institutional Dynamics can help companies assess the institutional requirements and expectations in terms of environmental, labor, social, and market activities.

The Business Landscape, the inner most section and the layer which most closely influences the enterprise, refers to the interests and concerns of the company and its key stakeholders. This is the most dynamic since stakeholder interests and business situation change over time. The Business Landscape can help companies identify the important players as well as the interplay between stakeholders.

SESSION PLAN DETAILS AND KEY MESSAGES

The session will have five session blocks: 1) Role of the Government and other Stakeholders; 2) Influences (Hexagon) Framework; 3) Roles and Responsibilities; 4) Good Governance and Responsible Mining Practices; and 5) Synthesis

(1) **Role of the Government** (15 mins). The objective of the session block is to discuss the role of the government and other stakeholders in the mining industry. It will also discuss the definition of governance, transparency and accountability in relation to the role of government and stakeholder issues.
(2) **Influences (Hexagon) Framework** (40 mins). The objective of the session block is to discuss the Influences (Hexagon) Framework and use it as a basis in analyzing the case facts.
(3) **Roles and Responsibilities** (15 mins). The objective of the session block is to discuss the role of stakeholders and how they can play a role to meet the objectives of the mining industry (i.e. sustainability and growth).
(4) **Good Governance and Responsible Mining Practices** (15 mins). The objective of the session block is to discuss the importance of environmental sustainability and good governance in promoting growth in the Australian mining industry.
(5) **Synthesis** (10 mins). The objective of the session block is to wrap up the discussion on the factors that influence the Australian mining industry, the role of government and stakeholders, and how they can work together to promote sustainable mining practices.

BOARD PLAN

For rooms with two boards:

Fundamental Influences	*Institutional Dynamics*	*Business Landscape*
Business Concerns	*Stakeholder Concerns*	*Conclusions*

For rooms with only one board:

Institutional Dynamics	Business Landscape	Conclusions
Fundamental Influences		

WRITTEN ANALYSIS OF THE CASE

Governance Concepts: Transparency and Accountability

The government and mining companies must adhere to governance principles of transparency and accountability.

- Transparency refers to relevant and accessible, as well as timely and accurate disclosure of information.[1] Information disclosed may refer to actual events, environmental and social impact, as well as distribution and use of royalty taxes.
- Accountability refers to the institutionalized relationship of actors that is based on expected behavior, investigation, answerability, and sanctions.[2]

Together, transparency and accountability hold firms up to the scrutiny of the public and enables citizens to influence decision-making. Often, leaving citizens without information and without a voice leads to feelings of disempowerment and inequity, and can create an environment of distrust for the industry.

Fundamental Influences

Natural Resources

Based on the case, the natural resources mined (exported in other countries) include: iron ore and black coal, mineral and energy commodities.

[1] Transparency Initiative, “Definitions.” http://www.transparency-initiative.org/about/definitions
[2] Transparency Initiative, “Definitions.” http://www.transparency-initiative.org/about/definitions

Based on additional research, Australia is among the top five producers of many of the world's key mineral commodities:

- the world's leading producer of bauxite, alumina, rutile, ilmenite, zircon and tantalum
- the second largest producer of, uranium, lead, zinc and lithium
- the third largest producer of gold, diamonds, iron ore, manganese, nickel and niobium
- the fourth largest producer of black coal and silver
- the fifth largest producer of aluminium, brown coal and copper.

History

Mining and the production of minerals in large quantities commenced upon European settlement. A clear and important part of Australia's history is the series of mining booms, which provided significant economic returns. Minor variations in annual production were attributed to the economic conditions prevailing at the time.

Small to medium-scale mining operations began with the discovery of coal in the late 18th century. Traces of gold were reported from 1823 onwards, and occurrences of other metals were reported from time to time. The first metalliferous mining was of silver-lead, at Glen Osmond near Adelaide, in 1841. Copper mining began at Kapunda in 1842, and at Burra, to the north, in 1844. At the end of the same decade, the first pig iron was produced from a small deposit of iron ore near Mittagong, New South Wales.

It was the discovery of payable alluvial gold in 1851 near Bathurst in New South Wales and, soon after, the rich Victorian fields which lead to the gold rush and gave impetus to the metalliferous sector of the mining industry. Around this time, Australia was producing almost 40 per cent of the world's gold, effectively spurring its transition from an agricultural and pastoral economy toward industries that supplied the machinery and transport facilities needed by the mines.

While the mining industry continued to prosper in the early years of the 20th century, it was severely affected by the collapse of metal prices after the end of World War I (1918). As a result, mineral exports fell from US$15.3 million in the period between 1919 and 1920, to US$7.6 million between 1921 and 1922.

The 1950s to the 1970s saw the emergence of the modern Australian mining industry, which was characterized by the discovery of major new base metals, iron, manganese, nickel and uranium deposits. The period saw the expansion and growth of production and exports. By 1960, Australia was a world leader in black coal, bauxite, iron ore, nickel, manganese, titanium, zirconium and uranium.

One of the reasons for the surge in discoveries in Australia was the increased geological knowledge due to the establishment of the Bureau of Mineral Resources Geology and Geophysics (1946), now the Geoscience Australia, and the increase in surveys of mineral resources by State and Territory Geological Surveys. Political stability also led to the influx of foreign mining companies that sparked an increase in exploration and investments, ushering in new expertise and ideas.

In 1975, the Olympic Dam Copper-Gold-Uranium Mine containing one of the world's largest deposits of uranium was discovered. The gold boom in the 1980s also led to the development of 24 new major gold mines and many smaller operations.

Institutional Dynamics

Basis of Economy: The Importance of Mining to the Australian Economy

In 2012–13, the gross value added by the Australian mining industry, in chain volume measures, increased 8.8 per cent, relative to 2011–12, to total $151.2 billion. Mining activities accounted for $140.4 billion of this total with exploration and mining support services contributing $10.8 billion. The Australian mining industry accounted for 10.1 per cent of Australia's GDP in 2012–13, up from 9.6 per cent in 2011–12.

Labor structure

Employment in the Australian mining industry, including services to mining, remained at around two per cent of Australia's total workforce in 2012–13. The average number of workers in the mining industry increased 6.7 per cent to around 266 146. Although the 2012–13 average was higher, the number of workers in the mining industry in the June quarter 2013 was around 15 900, or 5.7 per cent, lower year-on-year. This decrease in the mining workforce reflected the cost savings programs many mining companies have been implementing in Australia in response to lower commodity prices.

Political Structure: Australian Government

State and Territory Governments are the principal authorities for regulating onshore mining and exploration in Australia. Each state has a Mining Act and Mining Regulations (or equivalent) that regulates the ownership of minerals and operation of mining activities in that state, including licensing, royalty charges, environmental assessment and approvals as well as land access arrangements. In addition, the states have laws that address other areas including mine operation, mine inspection, occupational health and safety, environment, and planning. The government agency administering mining law in each state administers and sets out guidelines and policy statements relating to state mining legislation.

Some Commonwealth laws may affect the mining industry because the Commonwealth legislates over areas such as corporations, competition and trade practices, interstate and overseas trade, taxation, and defence and foreign affairs.

The Australian Government is involved in the environmental regulation of a resources activity if it is likely to have significant impacts on matters of National Environmental Significance (NES). Under the Environmental Protection and Biodiversity Conservation (EPBC) Act 1999, matters of NES include: listed threatened species and communities; listed migratory species; wetlands of international importance; nuclear actions; Commonwealth marine areas; World Heritage properties; and National Heritage places.

See Table 1 for the division of roles and responsibilities of the federal/Australian Government vs State Territories.

Market Structure

In 2012–13, Australian mine production increased 4.1 per cent, relative to 2011–12, underpinned by 6.2 per cent and 1.9 per cent increases in the output of energy and mineral commodities, respectively. Mine production is forecast to increase a further 1.4 per cent in 2013–14 as a result of substantial growth in iron ore and black coal production. Over the outlook period, further growth in iron ore and coal production, as well as a significant increase in LNG production, are projected to support total mine production increasing at an average annual rate of 5.4 per cent.

Australia's energy and mineral commodity export earnings decreased by 8.3 per cent in 2012–13, relative to 2011–12, to total $177.4 billion. Mineral commodities export earnings accounted for 61 per cent, or $107.9 billion, of this total and energy commodities export earnings accounted for 39 per cent, or $69.6 billion.

In 2013–14, total export earnings for mineral and energy commodities are forecast to increase 15 per cent, supported by robust growth in both mineral and energy commodity export volumes and a lower Australian dollar exchange rate. Mineral commodity export earnings are forecast to increase 18 per cent to total $127.7 billion, mainly due to substantial growth in iron ore exports. Export earnings from energy commodities are forecast to increase 9 per cent to total $76.1 billion, underpinned by higher earnings for LNG as well as thermal and metallurgical coal.

BUSINESS LANDSCAPE AND KEY CONCERNS

Regulatory Environment

Below are two key Australian laws, which require indigenous stakeholder engagement that the mining industry must comply with:

(1) **Native Title.** In 1992, the High Court of Australia held that the common law of Australia recognized a form of native land title. The Native Title Act 1993 includes 'future acts' that is an activity that occurs on land covered by a native title and includes resource and energy exploration and extraction. The Native Title Act 1993 sets out the ways in which activities affecting native title are undertaken. This includes procedural rights such as the right to be notified, the right to comment or the right to negotiate. This has resulted in dramatic improvements in the relation between the mining industry and Indigenous communities.[1]

(2) Aboriginal Land Rights (Northern Territory) Act 1976. The Aboriginal Land Rights (Northern Territory) Act 1976 (ALRA) provides for detailed regulation of exploration and mining on Indigenous land in the Northern Territory. The process is initiated by a company obtaining consent to negotiate from the Northern Territory Government. The consent allows the company to negotiate with Traditional Owners for an agreement which covers exploration and provisions about possible mining.
Amendments to ALRA in 2006 and delegation of responsibility for administering the exploration licence applications to the NT Government have improved the procedures to enable companies to access country.

Promoting Sustainable Development

The Australian government encourages sustainable development and in 2006, the Government launched the Leading Practice Sustainable Development Program for the Mining Industry, which provides the mining sector and its stakeholders "practical information and case studies to move beyond what is set down in regulation for mining activities."2 The objectives of the program are as follows:[3]

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[1] *Working with Indigenous Communities* on-line http://www.ret.gov.au/resources/resources_programs/lpsdpmining/handbooks/handbooks-English/Pages/English.aspx.

[2] Ibid.

[3] Australian Government-Department of Resources, Energy and Tourism. *"Leading Practice Sustainable Development Program for the Mining Industry,"* <http://www.ret.gov.au/resources/resources_programs/lpsdpmining/pages/default.aspx>(3 August 2010).

- INFORM – provide credible information on the practice of sustainable development in the Australian mining industry to build capacity and understanding among those who have an interest in Australia's mining industry, including non-government organizations, mining communities, students and international stakeholders information, on leading sustainable development practices.
- INFLUENCE – seek the commitment to lead the practice of sustainable development principles from high-level decision-makers in key organizations such as mining companies, government agencies, regulators, industry bodies, and mining contractors and service providers;

- IMPLEMENT – practically implement leading sustainable development practices at the operational level by on-site mine management and consultants, academics and regulators who work at the site level, provide training for those working at site level or regulating the mining industry.

The incorporation of sustainability into mining operations is an on-going challenge as new problems emerge and solutions are developed, or better solutions are devised. The challenge is meeting the expectations of shifting community and stakeholder expectations while continuing to meet legislative requirements.

In the minerals sector, sustainable development means that investments in minerals projects should be financially profitable, technically appropriate, environmentally sound and socially responsible. Businesses involved in extracting non-renewable resources have come under mounting pressure to embed the concept of sustainability into strategic decision-making processes and operations. In addition to these considerations, responsible corporations have been able to move towards sustainability by developing a range of appropriate stewardship initiatives.

Recently, a range of sustainable development policy frameworks have been developed by industry and other organisations that are now acting as drivers for improved practice. One such approach is that of the International Council on Mining and Metals (ICMM) which adopted a set of 10 Sustainable Development Principles in 2003 to harness the industry's commitment to sustainable development within a strategic framework (ICMM, 2003). To give practical and operational effect to the ICMM commitments, the Minerals Council of Australia (MCA) developed Enduring Value – the Australian Minerals Industry Framework for Sustainable Development (MCA, 2004). Enduring Value is designed to assist minerals sector managers to implement the sector's commitment in a practical and operational manner that is targeted at the site level.

In adopting Enduring Value, the Australian minerals sector is recognising that its future is linked to the pursuit of sustainable development, which means operating in a manner that is "attuned to community expectations and which acknowledges that business has a shared responsibility with government, and with broader society, to help to facilitate the development of strong and sustainable communities" (MCA, 2004).

SUMMARY AND CONCLUSIONS

Mining can fuel an economy's development and bring high levels of profit to the firm, but like any investment with potentially high rewards, it comes with its own unique risks that must be mitigated. Within the firm, mining corporations have the responsibility to ensure the safety of its employees within mine sites. Within the communities they operate in, firms must ensure that the negative impact of toxic mine tailings and other pollutants are mitigated, as they can destroy not just local ecosystems, but local industries dependent on these (such as agriculture, fisheries, tourism). If mismanaged, mining can lead to irreversible environmental

damage, hurting even future generations. If mining companies do not hold themselves accountable, the costly rehabilitation of abandoned mine sites will have to be unfairly shouldered by the government and the citizens. This will lead to a dissolution of public trust in mining firms, and will erode their social license to operate and can eventually lead to mining firms being shut down.

But if the firm conducts business responsibly and attends to the specific needs of the communities they operate in, all stakeholders can enjoy the benefits of mining. The firm will continue to make a profit, and the community and the government can share in the economic development and progress. Beyond sustainable development, responsible mining means that the firm holds itself accountable to the communities they affect by being transparent about their operations so that they can be held up for public scrutiny. Beyond the basics of transparency and accountability, responsible mining requires firms to engage communities and the government in continuous dialogue, partnership, and cooperation. Affected communities must have a voice in decision-making, as they will ultimately be affected by the outcomes, and governments are tasked to serve the interests of their citizenry by creating and enforcing legislation for the industry.

There is a need for all stakeholders to engage each other in continuous dialogue and foster the creation of partnerships that will encourage a more holistic view of the mining sector and its impact on the economy and society. Partnerships with the communities can help optimally allocate the social and economic benefits of mining, while the government must foster strategic stewardship and create an environment that promotes not just the industry, but the longer term interests of Australia. Beyond mitigating the environmental impact, mining stakeholders must also take into account the long-term ethical, social and cultural effects of their mining operations.

APPENDIX A

Key Social and Environmental Concerns	Key Initiatives
Resource availability due to finiteness of mineral resources	Government is considering imposing higher taxes on mining
Environmental and Social issues related to pollution (greenhouse gas emissions and mine tailings)	Increased regulation waste management and mine site rehabilitation and the creation of government agencies specifically for mining
Dependency of Australian economy on mining	Government investment in infrastructure and human capital to reduce dependency on mining
Incomplete and non-standardized sustainability reporting from mining corporations	Australian National Pollution Index

Key Business Concerns	Key Initiatives
A shortage of mining experts and skilled laborers	The industry has begun to look overseas (US and EU) to fill its talent gap
Decline in the quality of available minerals and ore; Fluctuations and declines in global prices of minerals	The industry is beginning to focus on other processing and value adding activities, and many Australian firms are also expanding into other countries
Managing the environmental footprint of mining; Planning for end-of-life mine closure and rehabilitation	Increased investment in waste management technologies, environmental impact studies conducted during exploration stage, and mandatory funds set aside for rehabilitation
Social License to operate	Investments in primary, secondary and tertiary education and infrastructure in communities; Self-policing and increased transparency reporting; Creation of mining industry associations committed to sustainability; Stakeholder engagement through dialogue and partnership

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SMI AND THE BLAANS: A SUSTAINABLE DEVELOPMENT ALLIANCE TEACHING NOTE

ABSTRACT

An effective Corporate Social Responsibility (CSR) strategy must take into account the external and internal environment under which a company operates. Taking these into consideration, a CSR strategy that includes a systematic plan for all the stages in the mine life cycle must then be developed. Due to the changing terrain across the stages, however, a company must be prepared to manage issues and challenges that may arise, and recognize that there may be a need to make changes and improvements on their CSR strategy along the way. The case of Sagittarius Mines Inc.'s Tampakan Copper-Gold Project in Mindanao presents the potential issues and challenges that mining companies may face during the pre-exploration and exploration stages. It also demonstrates how best practices could foster buy-in to the project; gaining the company much needed allies in the face of opposition from some groups.

Key Words: Corporate Social Responsibility, Mining, Stakeholder engagement
Economy: Philippines

PRIMARY TOPIC AND USE

The case focuses on the pre-exploration and exploration stage of the mine life cycle, and the potential problems that mining companies may face during these stages. Specifically, the case could be used to discuss the following: 1) assessment of social and environmental issues; 2) stakeholder mapping; and 3) stakeholder engagement.
The case of SMI can be used in the discussion of CSR in management courses, and for programs and capacity-building seminars for stakeholders in the mining industry. Since the case presents the experience of a mining company that is still in the pre-exploration and exploration stages, it could be used with the following case studies when discussing CSR in all the stages of the mine life cycle:

- Philex Mining Corporation, Multi-site Implementation of CSR (Exploration, Extraction, Rehabilitation)
- Rebuilding the Trust: The Rapu Rapu Experience (Extraction)
- Antamina and the Mining Fund (Extraction, Rehabilitation)

This case study could also be used in the discussion of the following topics:

- Indigenous peoples as major stakeholders in a mining project; and,
- Successful reversal of negative legacy left by a previous mining company through CSR practices.

It can also be used to discuss:

- Indigenous Peoples as allies of a mining company, value of having a reserve of public trust; and,
- Local government policy on mining in conflict with state policies.

PREREQUISITES

To fully appreciate the case, and meet its learning objectives, participants must be familiar with the following:

- Mine life cycle or stages, with a focus on the pre-exploratory and exploratory stages
- Mining footprint analysis – analyzing the social and environmental impact of the project; identifying stakeholders
- Stakeholder assessment -- stakeholder analysis (interests and concerns) and determining their priorities

KEY LEARNING OBJECTIVES

At the end of the discussion, participants should be able to:

- Understand that a CSR strategy cannot be created in a vacuum; external and internal forces must be taken into account;
- Appreciate the value of having a well-developed CSR strategy; how it allows for better management of issues and challenges;
- Identify stakeholders and their issues and concerns;
- Assess stakeholders' issues and concerns and identify which ones need to be given priority;
- Understand how CSR practices could facilitate buy–in to the project, and how having a reserve of public trust could cushion potential blows to the mining project;
- Recognize the value of stakeholder engagement.

ASSIGNED STUDY QUESTIONS

- What are the issues and challenges that SMI faced in the pre-exploration and exploration stages?
- Who are the critical stakeholders of SMI? What are their concerns?
- What is the level of commitment of the stakeholders in the mining operation? What is their level of influence?
- How did the company address the various issues and challenges? What measures did they put into place to address them?

Other Materials that Could be Assigned as Required Reading or References

Alfonso, Felipe B. and James P. Neelankavil. (2009). "CSR and Collaborative Partnerships." AIM Journal of Asian Management: Special Issue on Corporate Social Responsibility. Vol 01 Issue 01, 2009. Makati City: Asian Institute of Management.

RVR Center (2011). "Towards Strategic CSR: Aligning CSR with the Business and Embedding CSR into the Organization (A Manual for Practitioners)"

SUMMARY SESSION PLAN

The session will have five discussion blocks: 1) Developing a CSR Strategy 2) Stakeholder Identification, Analysis and Assessment; 3) SMI's CSR Strategy and Initiatives; 4) Stakeholder Engagement; and 5) Synthesis.

- **Developing a CSR Strategy** (15 mins): The objective of this session block is to discuss the fundamentals in developing an effective CSR strategy.

- **Situation Analysis: Footprint and Stakeholders** (20 mins): The objective of this session block is to identify the social and environmental footprint of SMI's operations as well as the company's stakeholders and their concerns.

- **SMI's CSR Strategy and Initiatives** (20mins): The objective of the session block is to discuss SMI's CSR strategy and initiatives.

- **Stakeholder Engagement** (15 mins): The objective of the session block is to discuss the value of stakeholder engagement. SMI's stakeholder engagement activities will also be discussed.

- **Synthesis** (10 mins): The objective of the session block is to wrap up the discussion about the potential issues and concerns faced by mining companies in the pre-exploration and exploration stages. The participants could also provide suggestions on how SMI could improve its community engagement strategies.

Board Plan

Board 1	Developing a CSR Strategy
Board 2	Stakeholder Analysis: Influence/Commitment
Board 3	Classification of Stakeholders: Level of Influence/ Level of Commitment
Board 4	SD Policies vs. SD Initiatives

ANALYSIS OF CASE[1]

Sagittarius Mining Incorporated manages the Tampakan Copper-Gold Project in Mindanao. The company adhered to environmental codes, the Philippine Mining Act, and has adopted and applied the global policies of one of its major investors, Xstrata Copper, in their pre-exploration and exploration activities. Nevertheless, despite all these, as well as gaining the much valuable support of one of the major stakeholders, the tribal communities known as Blaans, the company still faces legitimacy issues.

As the company prepares for the next stage in the mining cycle, their greatest challenge is to get the necessary permits from the national and local governments to push through with operations set in 2016. South Cotabato's ban on open pit mining poses a major obstacle.
Who are the stakeholders and what is their position towards SMI's Tampakan Project? Who are the potential allies and "enemies" of SMI? How could SMI set priorities and address the needs of the stakeholders?

Background

The proposed mine site is situated in the southern part of the Philippines, specifically on the boundaries of South Cotabato, Sultan Kudarat, Saranggani, and Davao del Sur. Considered one of the largest undeveloped copper-gold deposits in the Southeast Asia-Western Pacific region, the site is believed to have the potential to increase the country's GDP by an average of 1% per year.

Initial exploration of the mine site was first conducted by Western Mining Corporation Philippines (WMCP) from 1990 to 1991. Results of the exploration, which confirmed the presence of copper and gold, prompted WMCP to apply for a financial or technical assistance agreement (FTAA) with the Philippine government. In 1995, the FTAA was awarded to WMCP. Later on, however, funding problems and growing opposition from the local community forced WMCP to turn over the project to SMI. In 2002, the Sagittarius Mines Inc. (SMI), through a financial and technical assistance agreement with the Philippine Government, was contracted to explore, develop, and operate the Tampakan Copper-Gold Project. *The project cost is valued at US$5.5 billion.*[2]
The project is set to go into full operation by 2016.

Developing a CSR Strategy

There is no "one size fits all" CSR strategy. Thus, in developing an effective CSR strategy, it is essential to first examine the internal and external forces that affect a company's operations. Next in order is an examination of the interface between the company and its environment. In the case of mining companies, their operations follow a definite life cycle marked by several stages. Each stage involves key activities (Figure 1), an analysis of which could help determine the company's potential environmental and social effects or its mining footprint. The main objective of a CSR strategy in terms of the mining footprint is to minimize the negative impact, and maximize the positive impact.

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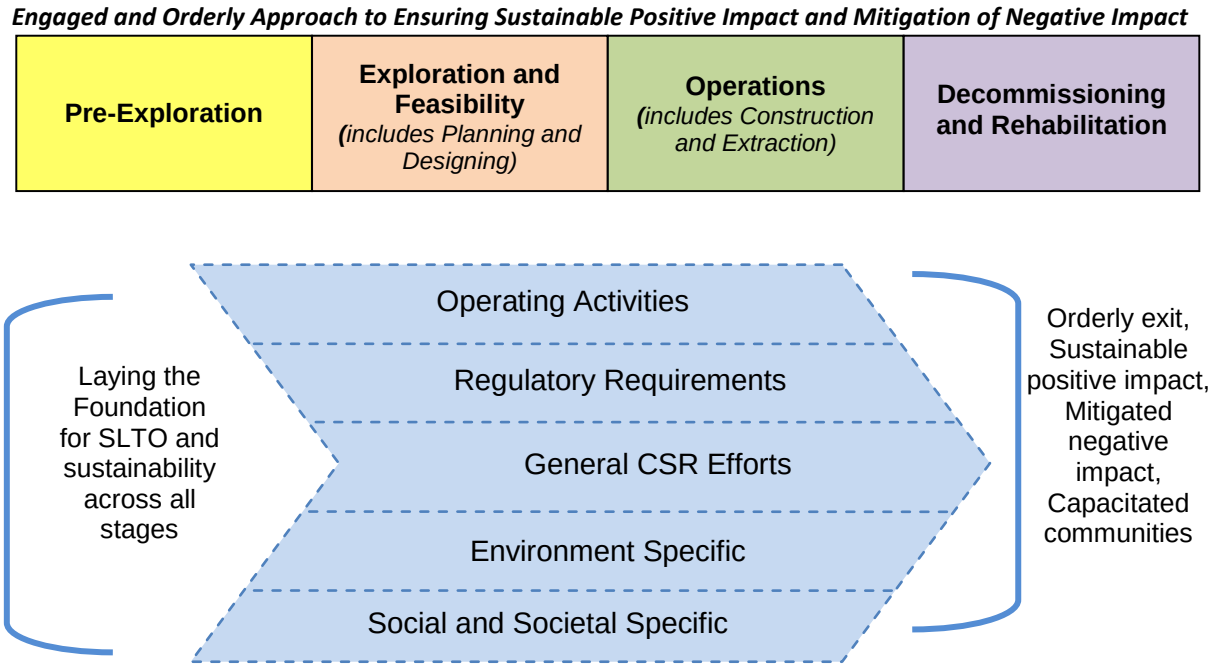
[1] Unless otherwise indicated, all case facts were taken from the teaching case: Cristina I. Alarilla, "SMI and the Blaans: A Sustainable Development Alliance," in Asian Institute of Management-Ramon V. del Rosario Sr. Center for Corporate Social Responsibility, *CSR in Mining for APEC Economies: Training Program Design Management Teaching Cases (Makati City,2011), TC1:1-14.*

[2] Note: All sections in italics from this page onward are not case facts but were taken from: Cristina I. Allarila, "A Case Study on Sagittarius Mines, Inc.: How Sustainable Development is Integrated into the Core Business Practices of an Exploration Company," in Asian Institute of Management-Ramon V. del Rosario Sr. Center for Corporate Social Responsibility, *CSR in Mining for APEC Economies* (Makati City, 2011), CS1:1-25.

The framework (Figure 2) illustrates the factors that need to be considered in developing a CSR strategy. Business context refers to the company's footprint (environmental and social impacts) and internal and external stakeholders and their issues and concerns. Corporate assets and capabilities are the company's resources and competencies. These two factors, as well as the company's mission and core values, must be taken into account when crafting a CSR strategy, with the end in view of creating social value.

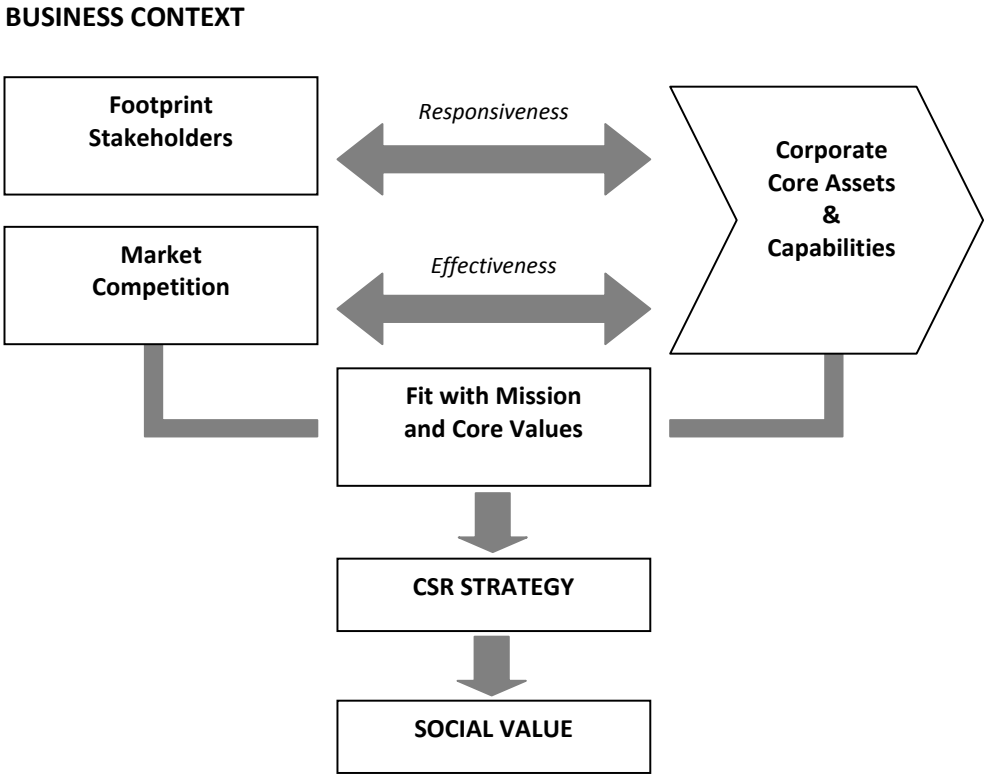
In developing a CSR strategy for a mining project, it is important to plan for all the stages of the mine life cycle. Mining operations have a definite end, and this end signifies managing the "disturbances" that were caused by mining operations on the environment, as well as preparing the community to survive the eventual closure of the mine. Thus, it is critical for a mining company to plan ahead and include closure and rehabilitation programs in its CSR strategy.

FIGURE 1: THE STAGES APPROACH TO SUSTAINABLE MINING



Source: Maria Elena Baltazar Herrera (2012). Adapted from the Presentation " Framework for Strategic CSR in the Mining Sector" CSR in Mining in APEC Economies: Train the Trainers Program (4-8 June 2012), Legaspi City, Philippines

FIGURE 2: DEVELOPING A CSR STRATEGY FRAMEWORK



Source: Herrera, M.B., Alarilla, M.I. and Uy, R.L. (2011). *Towards Strategic CSR: Aligning CSR with the Business and Embedding CSR in the Organization: A Manual for Practitioners*. Makati City: Asian Institute of Management.

Footprint Analysis and Stakeholder Identification

Stakeholders and concerns vary across the different stages of the mine life cycle. The identification and analysis of stakeholders, and their issues and concerns, are crucial in crafting an effective CSR strategy. Key to these is an assessment of the company's mining footprint, which is done through an examination of key activities in each stage (Figure 2) vis-à-vis the business landscape within which the company operates.

SMI was granted an FTAA for the Tampakan Project in 2002. Since then, pre-exploration and exploration activities (Table 1) have been underway, in preparation for actual operations set in 2016.

Table 1. SMI's Activities in the Pre-exploration and Exploration Stages

KEY ACTIVITIES	IN PROCESS[1]
Application for Government and Environmental Permits	•
Information and Education Campaign	•
Stakeholder Analysis and Initial Engagement	•
Completion of Baseline Environmental and Social Reports	•
Submission of Additional Requirements for Government Permits	•
Evaluation of Commercial Viability of Mineral Resources	•

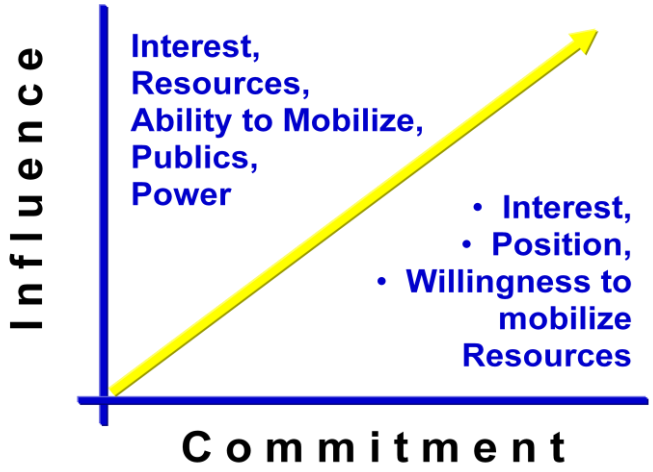
[1] See Exhibit 1 for a detailed summary of SMI's pre-exploration and exploration activities/SD initiatives which is based on information provided in Cristina I. Alarilla, "A Case Study on Sagittarius Mines, Inc.: How Sustainable Development is Integrated into the Core Business Practices of an Exploration Company."

License to Operate, especially from Direct Impact Stakeholders	•
Relocation and Resettlement Activities	•
Infrastructure Development (Mine Site and Auxiliary/ Support Infrastructure)	•

Stakeholder Analysis

A look into the key activities in each stage of the mine life cycle and the environment in which it operates will reveal the stakeholders of the project. An analysis of stakeholders and assessment of their issues and concerns should then be conducted, part of which is determining the levels of influence and commitment of stakeholders (Figure 3), which will allow a company to determine the priority of stakeholders and issues that could be critical to the project's success.

FIGURE 3: STAKEHOLDER ANALYSIS: INFLUENCE AND COMMITMENT



Source: Hererra, Maria Elena. CSR Collaboration. (January 2008). Presentation during the ASEAN Conference January 2008 as cited in Herrera, Maria Elena. "Strategic Cross-Sector Alliance for Sustainable Development."

In evaluating stakeholders' levels of influence and commitment, the following could be asked:[1]

- What are their objectives? What do they want to accomplish?
- What is their level of interest?
- What is their level of influence?
- What are their assets and competencies?
- What are their impacts on the company's operations and local community?
- What are their perceptions about the company and the company's operations?
- What would we like from them?
- How are we performing based on their interests?
- How do other companies deal with them at the local and industry level?

Key Players in the Tampakan Project

In the pre-exploration and exploration stages, mining companies would have to deal with government and concerned agencies, local governments, and the community. A profile of identified key players in the Tampakan Project is shown in Table 2.

[1] Herrera, Maria Elena. "Strategic Cross-Sector Alliance for Sustainable Development." PowerPoint presentation.

Table 2. Profile of Key Players in the Tampakan Project

	GOVERNMENT	COMMUNITY
What are their objectives? What do they want to accomplish?	National Government Regulate mining industry Economic gains from harnessing mineral resources Protect the welfare of the environment and the community Government Agencies (DENR, MGB) Implement mining laws (i.e. issue permits and certificates) Local Government (South Cotabato) Protect the environment	IPs (Blaans) Protect environment and ancestral lands Economic and Social Development Preservation of culture and practices Catholic Church (Diocese of Marbel) Preserve culture and values of IPs *Protect environment* Armed Group (NPAs) *Protect environment* Farmer Group (Federation of Irrigators Association) Protect water source
What is their level of interest?	National Government High - Considered as one of the biggest mining investments in the economy, the project could contribute significantly to the economy Government Agencies (DENR, MGB) High – Front liner, responsible for ensuring that the project complies to state laws and policies Local Government (South Cotabato) High – area included in scope of mining project	IPs (Blaans) High - direct impact stakeholder Catholic Church (Diocese of Marbel) High – *fears mining operations will destroy the environment* and that SMI is "brainwashing" and promoting materialism in the IPs Armed Group (NPAs) High – *fears mining operations will destroy the environment* Farmer Group (Federation of Irrigators Association) High – fears mining operations will affect their water source

	GOVERNMENT	COMMUNITY
What is their level of influence?	National Government High – Under the Philippine Constitution, the state has full control and supervision of the exploration, development, and utilization of mineral resources Government Agencies (DENR, MGB) High – Issues permits and certificates Local Government (South Cotabato) High – Their environmental code banning open pit mining method covers the Tampakan Project	IPs (Blaans) High – Under state laws, mining companies who will operate on ancestral lands need to obtain Free and Prior Informed Consent (FPIC) from IPs Catholic Church (Diocese of Marbel) High (Note: More than 80% of the Philippine population is Catholic. Although the Constitution pronounces a separation of Church and State, the Catholic Church's influence over socio-political matters has long been recognized.) Armed Group (NPAs) High – *fears mining operations will destroy the environment* Farmer Group (Federation of Irrigators Association) High – fears mining operations will affect their water source

	GOVERNMENT	COMMUNITY
What are their assets and competencies? What are their impacts on the company's operations and local community?	National Government Regulates mining industry, enacts mining laws, prescribes fiscal rewards and penalties Government Agencies (DENR, MGB) Inspector/assessor of mining projects Issuer of permits and certificates Local Government (South Cotabato) Authority over locality	IPs (Blaans) Owns ancestral lands Power to give or withhold consent (FPIC) Catholic Church (Diocese of Marbel) No information in teaching case (Note: As a predominantly catholic economy, the church has been known to have the power to influence/ impede legislation/government actions) Armed Group (NPAs) Their raid and burning of SMI's facilities proved their capability to impede operations Farmer Group (Federation of Irrigators Association) Put up protests

	GOVERNMENT	COMMUNITY
What are their perceptions about the company and the company's operations?	National Government As a mandating/regulatory body: Presumed to be NEUTRAL Government Agencies (DENR, MGB) As an implementing/ regulating body: Presumed to be NEUTRAL Local Government (South Cotabato) ANTI: Opposes open pit mining method	IPs (Blaans) PRO: Recognizes benefits that could be gained from the project Catholic Church (Diocese of Marbel) ANTI: Company encouraged materialism in IPs/lured them with monetary gains to obtain support *Mining projects will destroy the environment* Armed Group (NPAs) ANTI: As evidenced by their raid and burning of SMI's facilities Farmer Group (Federation of Irrigators Association) ANTI : As evidenced by the protest they mounted against SMI
What does the company want from them?	National Government No information in teaching case Known Fact: Like all other mining companies/investors, a fiscal and legal environment that is "friendly" to the mining industry is desired Government Agencies (DENR, MGB) Granting of permits and certificates Local Government (South Cotabato) Repeal local code banning open pit mining	IPs (Blaans) FPIC Catholic Church (Diocese of Marbel) Armed Group (NPAs) Farmer Group (Federation of Irrigators Association) Social license to operate

	GOVERNMENT	COMMUNITY
How are we performing based on their interests?	National Government None indicated in teaching case Government Agencies (DENR, MGB) None indicated in teaching case Local Government (South Cotabato) Unsatisfactory (based on their enactment of a local code which prohibits the mining method which is set to be used by the project)	IPs (Blaans) Satisfactory Catholic Church (Diocese of Marbel) Armed Group (NPAs) Farmer Group (Federation of Irrigators Association) Unsatisfactory (based on their protests against the Tampakan Project)
How do other companies deal with them at the local and industry level?	National Government None indicated in teaching case Government Agencies (DENR, MGB) None indicated in the teaching case Local Government (South Cotabato) None indicated in teaching case	IPs (Blaans) In the case of WMPC, a former mining company, the Blaans preferred their employment policies Catholic Church (Diocese of Marbel) Armed Group (NPAs) Farmer Group (Federation of Irrigators Association) None indicated in teaching case

Sagittarius Mines, Incorporated (SMI)

Added to the challenge of obtaining a social license to operate, SMI needs to reverse legacy issues left by previous mining companies. And like any other mining company, SMI has had to make considerable investments during the pre-exploration and exploration stages of the project. It is therefore crucial that the project reaches commercial operations so that the company can get a return on these investments. As a company that believes in responsible mining, SMI is putting out considerable efforts to maximize the social and economic benefits of the project while minimizing its negative effects.

Local Government of South Cotabato

In 2010, the Provincial Government of South Cotabato, adopted its own Environmental Code, which bans open pit mining in the province. (SMI had by then already announced that the project would use open pit mining.)

National Government

Under the 1987 Constitution, "the exploration, development, and use of mineral resources shall be under the full control and supervision of the state."

DENR

Under the Philippine Mining Act of 1995, the Department of Environment and Natural Resources (DENR) and the Mines and Geosciences Bureau (MGB), are tasked to regulate the behavior and practices of mining companies. In addition, under the administration Code of 1987, the DENR was identified as the agency that would carry out the state's constitutional mandate to "...control and supervise the exploration, development, utilization and conservation of the Philippines' natural resources" and that it is responsible for formulating and implementing policies related to this mandate.

The Blaans

Several groups and tribes belonging to the Blaan community will be directly affected by the mining operations. The Blaans at first had some reservations about the mining project and some minor complaints about the company's operations. Eventually, however, after recognizing SMI's efforts towards mining Tampakan responsibly, and the potential benefits that their people could get from the company's sustainable development programs, they became supporters.

Church

The Diocese of Marbel strongly opposed the project. In a statement released in 2008[1], Bishop Gutierrez stated that "The clergy will continue to be determined and united in its stand against any undertaking that promotes only corporate greed like large scale open pit mining, undermining environmental, social and economic justice, ecological balance and cultural legacy for the present and future generation." The Diocese also accused SMI of encouraging "materialism" in the Blaan tribes, and believed that the company lured the tribes with monetary rewards and material things to gain their support.

New People's Army (NPA)

SMI also faced opposition from the New People's Army, a communist insurgent group that in 2008 raided and burned down the administration building, quarters, and other facilities inside the company's base camp. A statement released by the

[1] Robert Goodland and Clive Wicks. "Philippines: Mining or Food? Case Study 3: Copper and Gold Mining in Tampakan, South Cotabato – Mindanao Island," 2008, <http:www.piplinks.org/system/files/Mining+or+Food+Case+Study+3.pdf> (October 2010), as cited in

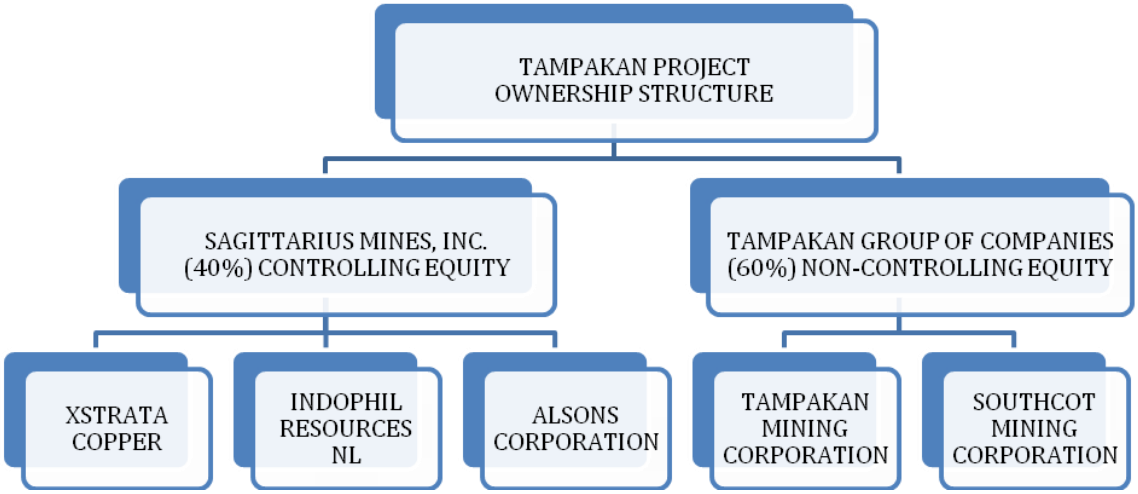
Communist Party of the Philippines, the political arm of the NPA, said the raid against SMI was "an important milestone in the effort to put a stop to the firm's destructive and plunderous mining operations." It said it also launched the attack "to defend the ancestral domain of the Blaan tribe, protect the environmental balance of the Liguasan Marsh and water supply of South Cotabato, North Cotabato, Sultan Kudarat and General Santos City areas; and resist the Arroyo regime's campaign to auction off the economy's natural resources to big foreign capitalists."[1]

Farmer Group

A group of farmers belonging to the Federation of Irrigators Association in Davao City also mounted a protest in 2008. Members of the federation feared that the wastes from the project would destroy their sources of water, and that the dam that the company is set to build will use water from the Mal River, and not rain water as the company promised. The river is the main source of water for irrigation of three municipalities.

Sagittarius Mines Incorporated

SMI, a Filipino company representing investors Xstrata Copper (Xcu), Indophil Resources NL, Alsons Corporation, owns a 40% controlling stake in the Tampakan project. The Tampakan Group of Companies, which represents the Tampakan Mining Corporation and the Southcot Mining Corporation, owns a 60% non-controlling stake (Figure 4).



Source: Sagittarius Mines, Incorporated, as cited in Cristina I. Alarilla, "A Case Study on Sagittarius Mines, Inc.: How Sustainable Development is Integrated into the Core Business Practices of an Exploration Company."

Figure 4. Ownership Structure of the Tampakan Project

In 2007, Xstrata Copper bought 62.5% of SMI and took over the management of the company. Xstrata Copper, which is based in Switzerland, is a subsidiary of the global mining group Xstrata Plc, and is in charge of copper operations and development around the globe.[2] In line with Xstrata's commitment to employing only the highest standards and best

[1]Marco Valbuena. "Communist Party of the Philippines Information Bureau Release: Mining firm punished for landgrabbing, plunder – CCP," 2 January 2008, http://www: minesandcommunities.org/article.php?a=8434 (October 2010), as cited in Allarila, *A Case Study on Sagittarius Mines, Inc.: How Sustainable Development is Integrated into the Core Business Practices of an Exploration Company, CS1-14.*

[2]Xstrata Copper. "About Us: Our History," <http://www.xstratacopper.com/EN/AboutUs/Pages/Our%20History.aspx> (August 2012).

practices in all its undertakings, all of its operations around the globe are to be guided by its Sustainable Development Policy.

Xstrata's Sustainable Development Policy

We are committed to the goal of sustainable development. We balance social, environmental and economic considerations in how we manage our business. We believe that operating to leading standards of health, safety and environmental management, contributing to the development of sustainable communities, and engaging with our stakeholders in two-way, open dialogue, regardless of our location, enhances our corporate reputation and is a source of competitive advantage. This enables us to gain access to new resources, maintain a license to operate, attract and retain the best people, access diverse and low-cost sources of capital, identify and act upon business opportunities, and optimize our management of risks.

We comply in full with the laws and regulations in each country where we operate. In addition, we operate in accordance with Xstrata's sustainable development framework, aspiring to achieve the highest international standards regardless of location and without exception. We conduct regular internal and external audits of our businesses and operations to assure compliance with our business principles, policies and standards.

Source: Xstrata. "Our Approach: Policy," <http://www.xstrata.com/sustainability/ourapproach/policy/>

SMI's CSR Strategy and Initiatives

Following Xstrata's SD approach, SMI crafted its Sustainable Development Policy for the Tampakan Project.

SMI's Sustainable Development Policy

"Sustainable Development" describes SMI's approach to ensuring long-term viability and continued success of our business activities.
We invest in the long-term of the Tampakan Project, which provides a basis for social and economic development in the region. Although the lifespan of our activities is finite, we aim to invest in skills, social development, and economic benefits that outlive these activities.
We aspire for the highest conduct in business as set out in our Business Principles, to protect and enhance our corporate reputation, and ensure our ongoing access to mineral resources.
We aim to create value for our stakeholders by contributing to a sustainable environment through investments in our business to improve performance efficiency, to ensure the efficient use of resources such as water and energy, and to maintain safe and healthy workplaces.
To ensure a harmonious relationship with our stakeholders, minimize risk and secure an ongoing license to operate, we aim to create mutual benefits for stakeholders, working in partnership with the various parties who have an interest in or are affected by our business.

Source: Sagittarius Mines Inc. Sustainability Report, Tampakan Project as cited in Alarilla, "A Case Study on Sagittarius Mines, Inc.: How Sustainable Development is Integrated into the Core Business Practices of an Exploration Company."

SMI's Corporate-Community Sustainability Department (CCSD)

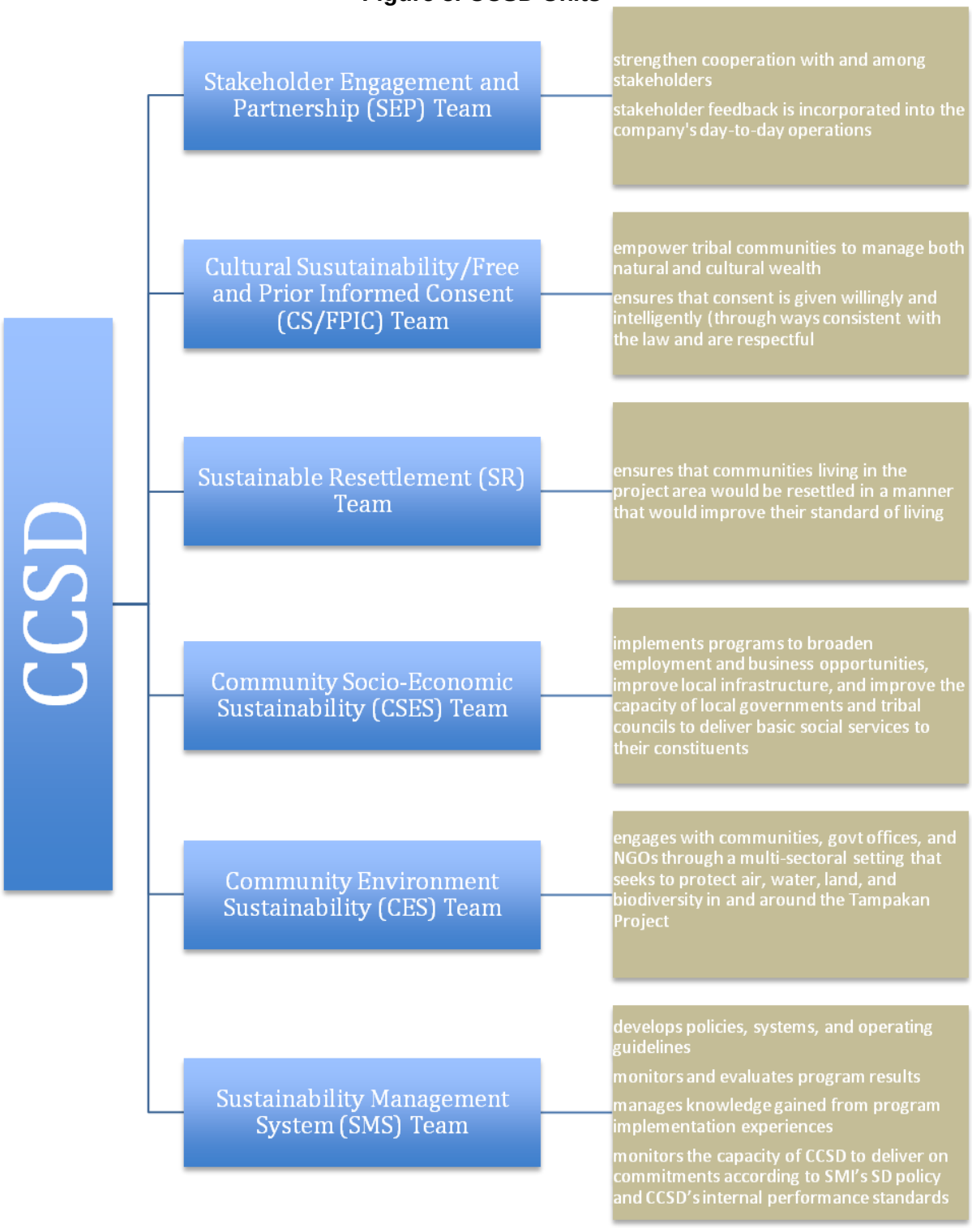
The CCSD is responsible for SMI's social programs related to gender, health and safety, culture, peace and conflict, and the environment. In 2009, several units were formed (Figure 5) under the CCSD to act as implementing arms of SMI's SD initiatives.

Strategic Objectives of CSSD

- To promote the financial viability and social acceptability of the company;
- To ensure the sustainable and equitable development of directly affected communities and surrounding areas of the company;
- To enhance the ability of the host and neighboring communities to appreciate, participate, and lead in ensuring their sustainable development; and
- To enable the indigenous communities to protect, promote, and preserve their indigenous knowledge, systems and practices.

Source: Leonardo Cortez, presentation to the Asian Forum on Corporate Social Responsibility, November 2009, as cited in Allarila, " A Case Study on Sagittarius Mines, Inc.: How Sustainable Development is Integrated into the Core Business Practices of an Exploration Company."

Figure 5. CCSD Units



Source: Sagittarius Mines Inc. "Sustainability Report 2009," as cited in Allarila, *A Case Study on Sagittarius Mines, Inc.: How Sustainable Development is Integrated into the Core Business Practices of an Exploration Company, CS1-4.*

In keeping with its commitment to "develop the Tampakan Project in an ethical way"[1], SMI instituted several SD initiatives and plans (Table 3).

Table 3. Sustainable Development Initiatives and Plans of SMI[2]

OBJECTIVE	INITIATIVES/PLANS
Community Development	Scholarships
	Enrolment in PHILHEALTH
	Farmer training program
Sustainability of Community Development Programs	Integrated its future community development programs into the value chain of SMI
Securing FPIC	Tour around other mine sites (to show potential benefits of the project)
	Practices and beliefs of Blaans considered in the development of the framework and the resettlement program
	Adhered to international standards on engaging with IP: • United Nations Declaration on the Rights of IP; • World Bank Operational Policy on IP; • International Finance Corporation's (IFC) Performance Standard on IP; • International Labor Organization (ILO) Convention 169: and International Council on Mining and Metals (ICMM) Sustainable Development Framework Principle on IP
	Mapped the tribes and clans (to identify consent mechanism)
	Worked on the allocation and distribution system for the royalties from the land to IP
Resettlement program	Adopted international policies and standards on land acquisition and inventory resettlement i.e. IFC Performance Standard No.5, UN Human Settlements Standard, MDG
	Tripartite partnership between an NGO, LGU and SMI would be formed to facilitate the implementation of the resettlement program
	Sustainable Resettlement Program Strategy: Infrastructure support to include community system, daycare, schools, irrigation, and livelihood projects to restore the income of people affected by the project. Rural infrastructure support also covered increasing the capacity of community-based People's Organization to manage their resources, and to access basic education and basic health care.
	Design of resettlement area was based on the cultural activities of the Blaans.
Changing the local community's mindset	Strictly implemented its employment and social investment policies (i.e. hiring of rotational workers to observe employment qualifications of SMI—limited "cutthroat hiring" among tribal communities)
	Education campaigns to help the community understand the role of the company—to guide the community towards development

[1] Ibid.
[2] Only SD initiatives discussed in the teaching case were included in this section. Exhibit 1 shows the extent of SMI's SD initiatives as discussed in the case study.

Understanding local culture	Cultural induction program-provided employees with understanding of the local culture, specifically that of the Blaans' (by December 2009, 173 employees and contractors had undergone the program)

Stakeholder Engagement

Stakeholder engagement is an important component of any CSR strategy. Neil Jeffrey, in his book "Stakeholder Engagement: A Road Map to Meaningful Engagement", states:

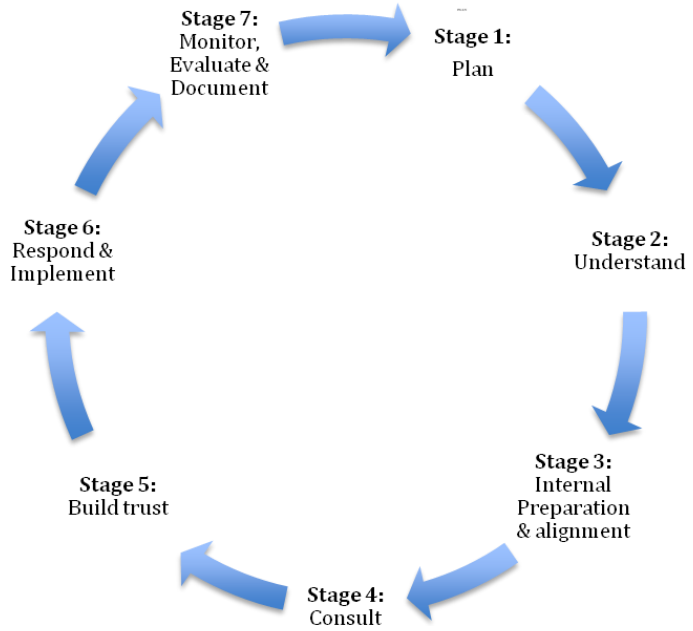
> The development of meaningful relations should add value to the organization's operations by: reducing constraints on business and increasing the license to operate; allowing it to plan for the future, minimizing risks and enhancing opportunities by better understanding the fast-changing PESTE (Political, Economic, Social, Technological, Environment) context; and, enabling it to better understand critics and potentially refute, convince or address criticisms. Furthermore it will enable organizations to reassure stakeholders that they are on top of issues, and in some cases, be essential for solving problems. (11)

When it comes to stakeholder engagement, it is best to engage stakeholders sooner, rather than later, and for a company to be proactive, rather than reactive.

> Situations arise when organizations do not actively engage but are forced to do so by the demands of society as a result of a crisis.... In response, organizations employ crisis management techniques, and are often forced into a defensive dialogue with stakeholders, leading to a significant and long lasting loss of reputation. This type of interaction is often antagonistic and damaging of trust. (Jeffreys 8)

One of the benefits of meaningful stakeholder engagement is that it allows companies to plan for the future, minimize risks, and enhance opportunities. A look into the process of meaningful stakeholder engagement (Figure 6) shows how input from stakeholders allows for improvisation of companies' programs, creating value for both the company and its stakeholders.

Figure 6. The Process Flow of Stakeholder Engagement



Source: Neil Jeffrey, "Stakeholder Engagement: A Roadmap to Meaningful Engagement."

Mining companies should especially find value in meaningful stakeholder engagement as they more often than not have to deal with negative perceptions associated with mining. Engagement activities provide mining companies with a venue to refute misconceptions and overturn negative perceptions towards mining.

SMI places a premium in stakeholder engagement.[1] In fact, a Stakeholder Engagement and Partnership (SEP) Team was formed to implement the company's engagement and collaborative initiatives.

The following are among some of SMI's stakeholder engagement initiatives:

1. Implemented the Tampakan Social Involvement Program in 2008, a stakeholder consultation scheme to help identify and define projects;
2. Toured the Blaans around other mine sites, informed them about the positive and negative effects of mining, as well as the different types of mining;
3. Factored in the demands of the local population in its development of a Biodiversity and Land Management Plan;
4. Established a grievance mechanism to resolve complaints, issues and concerns of stakeholders; and
5. Conducted stakeholders meetings to keep them well informed and provide them with a venue to air their concerns. Some 579 stakeholder issues were raised during the following meetings:
    a. September-December 2009: 43 private consultation meetings with around 2,863 individuals
    b. November 2009: 4 public meetings.

In engaging the Blaan tribes, the company will follow certain principles and guidelines, such as:[2]

- Adhering to international standards on engaging with indigenous people;
- Consulting all indigenous stakeholders in the area regardless of age, sex, gender, class, rank, organizational affiliation, educational attainment, ability, economic status, or religious belief
- Ensuring that no sector or individual was deliberately excluded from its community consultation processes and respecting the culturally accepted manner by which the specific indigenous communities arrive at a decision;
- Ensuring that the FPIC consultations are open and transparent, and that documents relevant to the process, such as information materials, the Environmental and Socio-Cultural Impact Assessment (ESCIA) document, and MOAs, are translated into the Blaan and other indigenous languages, and distributed to all stakeholders.

SESSION PLAN DETAILS AND KEY MESSAGES

Developing a CSR Strategy Session Block (15 minutes)

Key messages:

- *There is no "one size fits all" CSR strategy.*
- *A CSR strategy cannot be created in a vacuum. It is essential to examine the internal and external forces that the company has to operate in/with.*
- *In developing a CSR strategy for a mining project, it is important to plan for all the stages of the mine life cycle.*
- Background on the Tampakan Project
  This could include the following:

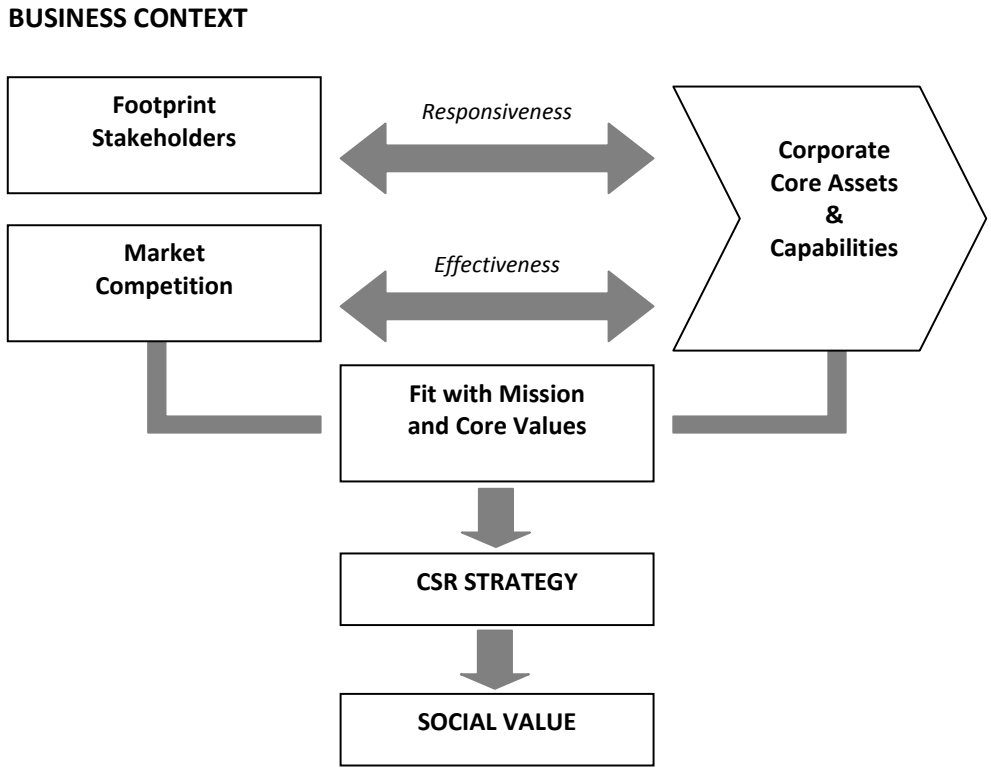
[1] See Exhibit 2 for SMI's Consultation and Engagement Activities in 2011.
[2] Cristina I. Alarilla, "SMI and the Blaans: A Sustainable Development Alliance," *TC1:1-9.*

- The proposed mine site is situated in the southern part of the Philippines, specifically in the boundaries of South Cotabato, Sultan Kudarat, Saranggani, and Davao del Sur.
- It is considered one of the largest undeveloped copper-gold deposits in the Southeast Asia-Western Pacific region. Successful mining of the site could increase the economy's GDP by an average of 1% per year.
- Initial exploration of the mine site was first conducted by the Western Mining Corporation Philippines (WMCP). However, funding problems and growing opposition from the local community forced WMCP to turn over the project to SMI.
- In 2002, the Sagittarius Mines Incorporated (SMI), through a financial and technical assistance agreement with the Philippine government, was contracted to explore, develop, and operate the Tampakan Copper-Gold Project.
- The projected cost of the project is pegged at US$5.5 billion.
- The project is set to go into full operation by 2016.
- Central Situation: SMI adhered to environmental codes, the Philippine Mining Act, and has adopted and applied the global policies of one of its major investors, Xstrata Copper, in their pre-exploration and exploration activities. Despite all these, the company still faces legitimacy issues.
- South Cotabato's Environment Code banning open pit mining poses a major obstacle to the implementation of the Tampakan Project

Fundamentals in Crafting a CSR Strategy

Using Board 1, discuss the CSR framework.

Board 1
Developing a CSR Strategy



There is no "one size fits all" CSR strategy. Thus, in developing an effective CSR strategy, it is essential to first examine the internal and external forces that affect the company's operations. Next in order is an examination of the interface between the company and its

environment. In the case of mining companies, their operations follow a definite life cycle marked by several stages. Each of the stage involves key activities (Figure 1), an analysis of which could help determine the potential environmental and social impact or the company's mining footprint. The main objective of a CSR strategy in terms of the mining footprint is to minimize negative impact, and maximize positive impact.

The framework illustrates the factors that need to be considered in developing a CSR strategy. Business context refers to the company's footprint (environmental and social impacts) and internal and external stakeholders and their issues and concerns. Corporate assets and capabilities are the company's resources and competencies. These two factors, as well as the company's mission and core values, must be taken into account when crafting a CSR strategy, with the end in view of creating social value.

In developing a CSR strategy for a mining project, it is important to plan for all the stages of the mine life cycle. Mining operations have a definite end, which means that companies must manage the "disturbances" that were caused by mining operations on the environment, as well as prepare the community to survive the eventual closure of the mine. Thus, it is critical for a mining company to plan ahead, including closure and rehabilitation programs in its crafting of a CSR strategy.

Note: It is suggested that the above framework be discussed briefly in relation to the Tampakan Project, as a thorough discussion of each of the factors will be taken up in the other session blocks.

Situation Analysis: Footprint and Stakeholder Session Block (20 minutes)

Key Messages:

- *It is important to identify the company's economic, social and environmental impact in analyzing stakeholder concerns*
- *Stakeholders and concerns vary across the different stages of the mine life cycle.*
- *The identification and analysis of stakeholders, and their issues and concerns, are crucial in crafting an effective CSR strategy.*
- *Stakeholders will often have disparate needs and wants, thus it is important to identify and prioritize those that are critical to the successful implementation of the mining project.*

Summary of the Company's Footprint

<u>Economic</u>

Employment opportunities
Taxes paid to the local and national government
Total required investment on the development of the mine site is USD5.5 billion

<u>Environmental</u>

- Change in terrain once operation starts (proposed extraction method is open-pit)
- Potential environmental degradation due to operations (i.e. contamination of water).
- Reforestation and rehabilitation initiatives

<u>Social</u>

- Need for relocation and resettlement of affected communities
- Potential influence on the local culture of the IPs (land is located within the ancestral domain of the Blaans)

- Community development activities (i.e. livelihood training)

See also Exhibit 1: SMI's Sustainable Development Initiatives

Lead Question: Who are the stakeholders in the Tampakan Project? What are their issues and concerns?

Summary of Principal Stakeholders and their Issues and Concerns

SMI
Return on Investment
Obtain social license to operate
Protect reputation

National Government
Regulate mining industry
Economic gains from harnessing mineral resources
Protect the welfare of the environment and the community

Government Agencies (DENR, MGB)
Implement mining laws (i.e. issue permits and certificates)

Local Government (South Cotabato)
Protect the environment

IPs (Blaans)
Protect environment and ancestral lands
Economic and Social Development
Preservation of culture and practices

Catholic Church (Diocese of Marbel)
Preserve culture and values of IPs
Protect environment (not in teaching case, but given in the case study)

Armed Group (NPAs)
Protect environment (not in teaching case, but given in the case study)

Farmer Group (Federation of Irrigators Association)
Protect water source

Brief Discussion the Issues and Concerns of Stakeholders

Sagittarius Mines Incorporated (SMI)
Aside from obtaining a social license to operate, SMI must reverse legacy issues left by previous mining companies. And like any other mining company, SMI has had to make considerable investments during the pre-exploration and exploration stages of the project. It is therefore crucial that the project pushes through with commercial operations so that it can get a return on these investments. As a company that believes in responsible mining, SMI is making considerable efforts to maximize the social and economic benefits of the project while minimizing its negative effects.

National Government
Under the 1987 Constitution, "the exploration, development, and utilization of mineral resources shall be under the full control and supervision of the State."

Government Agencies (DENR, MGB)

Under the Philippine Mining Act of 1995, the Department of Environment and Natural Resources (DENR) and the Mines and Geosciences Bureau (MGB), are tasked to regulate the behavior and practices of mining companies. In addition, under the administration Code of 1987, the DENR was identified as the agency that would carry out the State's constitutional mandate to "...control and supervise the exploration, development, utilization and conservation of the Philippines' natural resources" and that it is responsible for formulating and implementing policies related to the said mandate.

Local Government (South Cotabato)

In 2010, the Provincial Government of South Cotabato, adopted its own Environment Code, which bans open pit mining in the province. (SMI had then already announced that the project will utilize open pit mining in its operations)

IPs (Blaans)

Several groups/tribes belonging to the Blaan community will be directly affected by the mining operations. The Blaans at first had some reservations about the mining project and some minor complaints about the company's operations. Eventually, however, after recognizing SMI's efforts towards mining Tampakan responsibly, and the potential benefits that their people could get from the company's sustainable development programs, they became supporters of the project.

Catholic Church (Diocese of Marbel)

The Diocese of Marbel strongly opposed the project. The Diocese also accused SMI of encouraging "materialism" in the Blaan tribes, and believed that the company lured the tribes with monetary rewards and material things in order to gain their support.

Not in teaching case, but given in the case study: In a statement released in 2008, Bishop Gutierrez stated that "The clergy will continue to be determined and united in its stand against any undertaking that promotes only corporate greed like large scale open pit mining, undermining environmental, social and economic justice, ecological balance and cultural legacy for the present and future generation."[1]

Armed Group (NPAs)

SMI also faced opposition from the New People's Army (NPAs), a communist insurgent group that in 2008 raided and burned down the administration building, quarters, and other facilities inside the company's base camp.

Not in teaching case, but given in the case study: In a statement released by the Communist Party of the Philippines, the political arm of the NPA, "Yesterday's raid against SMI is an important milestone in the effort to put a stop to the firm's destructive and plunderous mining operations; defend the ancestral domain of the Blaan tribe; protect the environmental balance of the Liguasan Marsh and water supply of South Cotabato, North Cotabato, Sultan Kudarat and General Santos City areas; and resist the Arroyo regime's campaign to auction off the economy's natural resources to big foreign capitalists."[2]

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[1] Robert Goodland and Clive Wicks. "Philippines: Mining or Food? Case Study 3: Copper and Gold Mining in Tampakan, South Cotabato – Mindanao Island," 2008, <http:www.piplinks.org/system/files/Mining+or+Food+Case+Study+3.pdf> (October 2010), as cited in Allarila, *A Case Study on Sagittarius Mines, Inc.: How Sustainable Development is Integrated into the Core Business Practices of an Exploration Company, CS1-11.*

[2] Marco Valbuena. "Communist Party of the Philippines Information Bureau Release: Mining firm punished for landgrabbing, plunder – CCP," 2 January 2008, http://www: minesandcommunities.org/article.php?a=8434 (October 2010), as cited in Allarila, *A Case Study on Sagittarius Mines, Inc.: How Sustainable Development is Integrated into the Core Business Practices of an Exploration Company, CS1-14.*

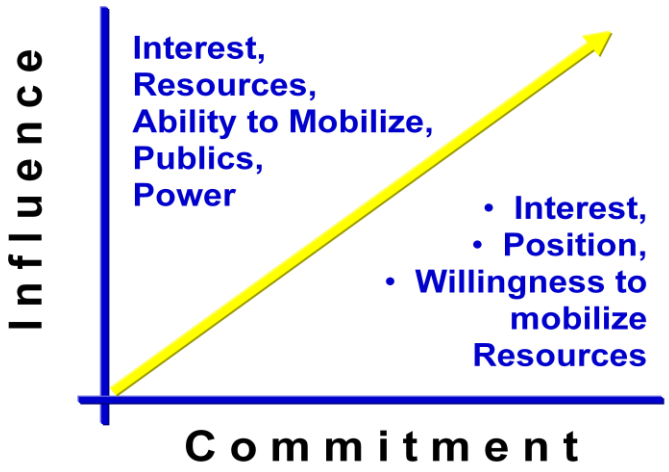
Farmer Group (Federation of Irrigators Association)

A group of farmers belonging to the Federation of Irrigators Association in Davao City also mounted a protest in 2008. Members of the federation fear that the wastes from the project would destroy their sources of water, and that the dam that the company is set to build will use water from the Mal River, and not rain water as the company promised. The river is the main source of water for irrigation of three municipalities.

Question: What are the key players' levels of influence? Their levels of commitment?

Using Board 2, discuss in brief stakeholder analysis in terms of level of influence and level of commitment.

Board 2
Stakeholder Analysis: Influence/Commitment



Source: Herrera, Maria. CSR Collaboration. (January 2008). Presentation during the ASEAN Conference as cited in Herrera, Maria Elena. "Strategic Cross-Sector Alliance for Sustainable Development."

Ask the students/participants to evaluate identified key players' levels of influence and commitment.

Use Board 3 to map them out. The following questions could be used to run the discussion:[1]

1. What are their objectives? What do they want to accomplish?
2. What is their level of interest?
3. What is their level of influence?
4. What are their assets and competencies?
5. What are their impacts on the company's operations and local community?
6. What are their perceptions about the company and the company's operations?
7. What would we like from them?
8. How are we performing based on their interests?
9. How do other companies deal with them at the local and industry level?

Note: Please refer to Table 2 (Profile of Key Players in the Tampakan Project) for possible answers to the above questions.

[1]Herrera, Maria Elena. "Strategic Cross-Sector Alliance for Sustainable Development." PowerPoint presentation.

At the end of the discussion on key players' profiles based on the above questions, ask the students/participants to classify key players' in terms of their level of influence and level of commitment. Use Board 3 to map them out.

Board 3
Classification of Stakeholders
Level of Influence/ Level of Commitment

High Level of Influence High Level of Commitment	High Level of Influence Low Level of Commitment
Low Level of Influence High Level of Commitment	Low level of Influence Low Level of Commitment

Who are the critical stakeholders? Which among the issues and concerns should be given priority? How should the company address these?

Note: In the discussion on South Cotabato's ban on open pit mining method, you may lead the discussion to the legality of the local ordinance, and whether it contradicts state laws. Here, the sequel/epilogue may be discussed in which the DENR's non-issuance of an Environmental Clearance Certificate (ECC) due to South Cotabato's Environment Code has put the Tampakan Project at risk of being canceled.

SMI's CSR Strategy and Initiatives Session Block (20 Minutes)

Key Messages:

- *Mining companies' daily operations/SD initiatives are best guided by an SD policy.*
- *As stakeholders' needs and wants vary, it is important to prioritize addressing those that are critical to the successful implementation of the mining project.*

SMI's Initiatives to Address Stakeholder Concerns

How did the company address the various issues and challenges? What measures did they put into place to address them?

Table 3 shows the possible answers as discussed in the teaching case. For the extent of SMI's SD initiatives, which were provided in the case study, Exhibit 1 may be used.

Table 3. Sustainable Development Initiatives and Plans of SMI

OBJECTIVE	INITIATIVES/PLANS
Community Development	Scholarships
	Enrolment in PHILHEALTH
	Farmer training program

OBJECTIVE	INITIATIVES/PLANS
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	Mapped the tribes and clans (to identify consent mechanism)
	Worked on the allocation and distribution system for the royalties from the land to IP
Resettlement program	Adopted international policies and standards on land acquisition and inventory resettlement i.e. IFC Performance Standard No.5, UN Human Settlements Standard, MDG
	Tripartite partnership between an NGO, LGU and SMI would be formed to facilitate the implementation of the resettlement program
	Sustainable Resettlement Program Strategy: Infrastructure support to include community system, daycare, schools, irrigation, and livelihood projects to restore the income of people affected by the project. Rural infrastructure support also covered increasing the capacity of community-based People's Organization to manage their resources, and to access basic education and basic health care.
	Design of resettlement area was based on the cultural activities of the Blaans.
Changing the local community's mindset	Strictly implemented its employment and social investment policies (i.e. hiring of rotational workers to observe employment qualifications of SMI—limited "cutthroat hiring" among tribal communities)
	Education campaigns to help the community understand the role of the company—to guide the community towards development
Understanding local culture	Cultural induction program-provided employees with understanding of the local culture, specifically that of the Blaans' (by December 2009, 173 employees and contractors had undergone the program)

Briefly discuss Xtsrata's and SMI's Sustainable Development Policies.

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We comply in full with the laws and regulations in each country where we operate. In addition, we operate in accordance with Xstrata's sustainable development framework, aspiring to achieve the highest international standards regardless of location and without exception. We conduct regular internal and external audits of our businesses and operations to assure compliance with our business principles, policies and standards.

Source: Xstrata. "Our Approach: Policy," <http://www.xstrata.com/sustainability/ourapproach/policy/>

SMI's Sustainable Development Policy

"Sustainable Development" describes SMI's approach to ensuring long-term viability and continued success of our business activities.

We invest in the long-term of the Tampakan Project, which provides a basis for social and economic development in the region. Although the lifespan of our activities is finite, we aim to invest in skills, social development, and economic benefits that outlive these activities.

We aspire for the highest conduct in business as set out in our Business Principles, to protect and enhance our corporate reputation, and ensure our ongoing access to mineral resources.

We aim to create value for our stakeholders by contributing to a sustainable environment through investments in our business to improve performance efficiency, to ensure the efficient use of resources such as water and energy, and to maintain safe and healthy workplaces.

To ensure a harmonious relationship with our stakeholders, minimize risk and secure an ongoing license to operate, we aim to create mutual benefits for stakeholders, working in partnership with the various parties who have an interest in or are affected by our business.

Source: Sagittarius Mines Inc. Sustainability Report, Tampakan Project as cited in Alarilla, "A Case Study on Sagittarius Mines, Inc.: How Sustainable Development is Integrated into the Core Business Practices of an Exploration Company."

Looking at SMI's SD initiatives, did the company fulfill its SD policies for the Tampakan Project? (Use Board 3)

Board 3
SD Policies vs. SD Initiatives

SD Policies	SD Initiatives	
	Yes	No
We invest in the long-term of the Tampakan		

Project, which provides a basis for social and economic development in the region. Although the lifespan of our activities is finite, we aim to invest in skills, social development, and economic benefits that outlive these activities.		
We aspire for the highest conduct in business as set out in our Business Principles, to protect and enhance our corporate reputation, and ensure our ongoing access to mineral resources.		

SD Policies	SD Initiatives	
	Yes	No
We aim to create value for our stakeholders by contributing to a sustainable environment through investments in our business to improve performance efficiency, to ensure the efficient use of resources such as water and energy, and to maintain safe and healthy workplaces.		
To ensure a harmonious relationship with our stakeholders, minimize risk and secure an ongoing license to operate, we aim to create mutual benefits for stakeholders, working in partnership with the various parties who have an interest in or are affected by our business.		

How would you rate SMI's CSR strategy/SD initiatives?

If the extent of SMI's SD initiatives as detailed in Exhibit 1 is discussed:

If you were SMI, would you have gone to the same lengths that they did in terms of their SD initiatives for the Tampakan Project?
Do you consider them all necessary?

Stakeholder Engagement Session Block (15 minutes)

Key Messages:

- *Stakeholder engagement is an important component CSR.*
- *Stakeholder engagement enables companies to better understand their stakeholders' issues and concerns.*
- *Meaningful stakeholder engagement will allow companies to improve on their performance, benefiting both the company itself and its stakeholders.*
- *Stakeholder engagement activities provides mining companies with a venue to refute misconceptions and an opportunity to reverse negative perceptions.*

What is the value of stakeholder engagement?

- Benefits of meaningful stakeholder engagement:

Neil Jeffrey, in his book "Stakeholder Engagement: A Roadmap to Meaningful Engagement", states that:

> The development of meaningful relations should add value to the organization's operations by: reducing constraints on business and increasing the license to operate; allowing it to plan for the future, minimizing risks and enhancing opportunities by better understanding the fast-changing PESTE (Political, Economic, Social, Technological, Environment) context; and, enabling it to better understand critics and potentially refute, convince or address criticisms. Furthermore it will enable organizations to reassure stakeholders that they are on top of issues, and in some cases, be essential for solving problems. (11)

Why is it best to engage stakeholders sooner, rather than later? Be proactive, rather than reactive? What possible scenario would a company find itself in if it engages stakeholders only when a crisis situation arises?

According to Jeffrey, when companies wait until they are forced to engage stakeholders when crisis situations arise:

> … organizations employ crisis management techniques, and are often forced into a defensive dialogue with stakeholders, leading to a significant and long lasting loss of reputation. This type of interaction is often antagonistic and damaging of trust. (8)

Why is stakeholder engagement especially valuable to mining companies?

Mining companies should especially find value in meaningful stakeholder engagement as they more often than not have to deal with negative perceptions associated with mining. Engagement activities provide mining companies with a venue to refute misconceptions and overturn negative perceptions towards mining.

- SMI's Opinion on Stakeholder Engagement

What is SMI's take on stakeholder engagement? How would you rate their stakeholder engagement activities?

SMI places a premium in stakeholder engagement.[1] In fact, a Stakeholder Engagement and Partnership (SEP) Team was formed to implement the company's engagement and collaborative initiatives.

The following are among some of SMI's stakeholder engagement initiatives:

1. *Implemented the Tampakan Social Involvement Program in 2008, a stakeholder consultation scheme to help identify and define projects;*
2. *Toured the Blaans around other mine sites, informed them about the positive and negative effects of mining, as well as the different types of mining;*
3. *Factored in the demands of the local population in its development of a Biodiversity and Land Management Plan;*
4. *Established a grievance mechanism to resolve complaints, issues and concerns of stakeholders; and,*
5. *Conducted meetings to keep stakeholders well informed and provide them with a venue to air their concerns. Some 579 stakeholder issues were raised during the following meetings:*
    a. *September-December 2009: 43 private consultation meetings with around 2,863 individuals*

[1] See Exhibit 2 for SMI's Consultation and Engagement Activities in 2011.

b. November 2009: 4 public meetings.

6. Engaging the Blaans

How did SMI engage the Blaan tribes? Did they follow specific principles or guidelines in engaging IPs?

In engaging the Blaan tribes, SMI has pledged to:

- Adhere to international standards on engaging with indigenous people;
- Consult all stakeholders in the area regardless of age, sex, gender, class, rank, organizational affiliation, educational attainment, ability, economic status, or religious belief
- Ensure that no sector or individual was deliberately excluded from its community consultation processes and respect the culturally accepted manner by which the specific indigenous communities arrived at a decision;
- Ensure that the FPIC consultations were open and transparent, and that documents relevant to the process, such as information materials, the Environmental and Socio-Cultural Impact Assessment (ESCIA) document, and MOAs, were translated into the Blaan and other indigenous languages, and distributed to all stakeholders.

Synthesis Session Block (10 minutes)

Wrap up the discussion about the potential issues and concerns faced by mining companies in the pre-exploration and exploration stages.
The participants could also provide suggestions on how SMI could improve its community engagement strategies.

KEY CLOSING MESSAGES

- A CSR strategy cannot be created in a vacuum. It is essential to examine the internal and external forces that the company has to operate in/with.
- In developing a CSR strategy for a mining project, it is important to plan for all the stages of the mine life cycle.
- Stakeholders and concerns vary across the different stages of the mine life cycle.
- The identification and analysis of stakeholders, and their issues and concerns, are crucial in crafting an effective CSR strategy.
- As the various stakeholders usually have disparate needs and wants, it is impossible for a mining company to satisfy all of them, thus it is important to assess each one and give priority to those that are critical to the successful implementation of the mining project.
- Mining companies' daily operations/SD initiatives are best guided by an SD Policy.
- Stakeholder engagement is an important component CSR.
- Best practices could foster buy-in to the project, gaining the company much needed allies in the face of opposition from some groups.

EPILOGUE

In developing the Tampakan Project, SMI adhered to environmental codes, the Philippine Mining Act of 1995, and has adopted and applied the global policies of one of its major investors, Xstrata Copper, in their pre-exploration and exploration activities. And in line with its commitment to "develop the Tampakan Project in an ethical way," SMI instituted several SD initiatives and plans (Table 3), with some even going beyond the usual or the minimum required from mining companies (Exhibit 1) operating in the economy. The establishment of its own nursery, for example, which will propagate and maintain plant species that were

found in areas that will be “disturbed” by its operations, was built with the purpose of returning the areas to their original state.

Despite all its initiatives, the company still faces legitimacy issues and is in fact having problems securing an Environmental Compliance Certificate (ECC) from DENR. (2012) DENR has denied SMI’s application for an ECC, in light of South Cotabato’s Environment Code banning open pit mining. Early in 2012, SMI made an appeal to DENR, citing that there is no basis for the non-issuance of an ECC since they complied with all the requirements of DENR. Environment Secretary Ramon Paje, on the other hand, said that SMI should first settle the issue with the local government of South Cotabato.

SMI is set to use the open pit mining method, as it has been identified as the most economical way to mine the Tampakan site. The company is therefore seeking solutions to its problem and is considering going to court. They contend that the state does not prohibit open pit mining, and state laws should take precedence over local ordinances, such South Cotabato’s code.

South Cotabato maintains that the Local Government Code of 1991, which devolved powers to LGUs granted them “…authority to protect and co-manage the environment and enhance the right of the people to a balanced ecology.” Their ban on open pit mining, however, is inconsistent with state laws, which permit the use of the method.

In July 2012, President Benigno C. Aquino III issued Executive Order No. 79 entitled “Institutionalizing And Implementing Reforms In The Philippine Mining Sector Providing Policies And Guidelines To Ensure Environmental Protection And Responsible Mining In The Utilization Of Mineral Resources”. The Executive Order affirms that local ordinances should be in line with state policies and that state laws take precedence over local policies. Section 12 prescribes that “LGUs shall confine themselves only to the imposition of reasonable limitations on mining activities conducted within their respective territorial jurisdictions that are consistent with national laws and regulations.”

This recent development may very well be the answer to SMI’s current problem. Not only could it be used to strengthen SMI’s case if the current issue with the South Cotabato government is brought to court, but it might serve to overturn the DENR’s decision to not grant an ECC to the company, as the DENR’s mandate to implement and regulate the state mining policies is further clarified and affirmed by the executive order.
In the meantime, several groups have called for the cancellation of the Tampakan Project. Apart from the local government of South Cotabato, the Diocese of Marbel, the New People's Army, and the Federation of Irrigators Association (farmers), several anti-mining groups have
also opposed the project. Among them is the Youth for Bangsamoro Genuine Empowerment, a militant Moro organization. Its chairman, Arsad Solaiman ,is urging President Aquino to stop the Tampakan Project "to save the environment and put to halt the pollution of rivers in one of the remaining habitats of the B'laan tribes."[1] Another group, the Alyansang Makabayan (Bayan)-Socsksargen opposes the project and maintains that the Tampakan project is a “catastrophe in the making.”[2] The Tampakan Forum, an anti-mining group whose members include the Philippine Misereor Partnership Anti-Mining Inc. (PMPI), Social Action Marbel, Alyansa Tigil Mina (ATM), Philippine Association for Intercultural Development (PAFID), Legal Rights and Natural Resources Center-Friends of Earth Philippines (LRC-KSK), Philippine Indigenous Peoples Links (PIPLINKS) and the

[1] Bong Sarmiento, “Moro group joins opposition vs Tampakan mining project,” Sun Star Davao 25 Feb 2011 <http://www.sunstar.com.ph/davao/local-news/2011/02/26/141817/moro-group-joins-opposition-vs-tampakan-mining-project>

[2] Ibid.

International Working Group on Mining in the Philippines and IUCN CESP-SEAPRISE, has appealed to President Aquino to cancel the Tampakan Project.[1] In a press release prepared by technical experts of the London Working Group on Mining in the Philippines and members of the Tampakan Forum in March 2012, they argued that if the Tampakan Project is allowed to push through, it would be one of the most dangerous mines around the world.[2]

Other groups have also surfaced to express their support for the project. The Mindanao Business Council, which recognizes the potential of the Tampakan Project, and how its success could boost the economy of the region, has even adopted it as its "flagship project", and has maintained that it would be in the best interest of Mindanao to continue with the mining project.[3]

Three municipal mayors, whose localities are included in the scope of SMI's operations, have also expressed their support for the project. The mayors of Tampakan (South Cotabato), Kiblawan (Davao del Sur), and Columbio (Sultan Kudarat), criticized DENR for its non-issuance of an ECC. They all argue that their towns have benefited significantly from the project. Mayor Dati Amirh M. Musali of Sultan Kudarat credits the project for elevating the status of his town from a fourth-class municipality to second-class municipality. Furthermore, he says, the many indigenous people in his locality fully support the project. Tampakan Mayor Leonardo Escobillo says that the people in his town barely ate three times a day before the Tampakan Project. In addition, he says, SMI has implemented several community development programs for his town, and the company's spending on goods and services has boosted businesses in the area. Mayor Marivic Diamante of Kiblawan, Davao del Sur, says she wants the Tampakan Project to push through, citing the Php4.8 million worth of projects of SMI in 2008 alone, which benefited her people.[4]

The three mayors have sought the support of President Aquino "…for the reconsideration of the Environmental Compliance Certificate that has been denied, and for the amendment of the provincial environment code of South Cotabato." [5]

The Blaan tribes seem divided. Blaans from Lafla, Gumiket Ayem, Nakul Tana, Alyong 1, Alyong 2 and Bong S'bang are against the Tampakan Project and are "fighting for the preservation of their ancestral land, forest and their burial grounds." [6] Blaans from Pula Bato and Danlag in Tampakan and in Kimlawis, Kiblawa, on the other hand, support the project, and have reportedly put up road blocks to prevent opposing groups from entering the mining premises.[7]

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[1] Quiros, Judy, Aquiles Zonio and Orlando Dinoy, "3 Mindanao mayors seek Palace support for planned Xstrata mining project," Inquirer Mindanao 1 June 2012 <http://newsinfo.inquirer.net/204773/3-mindanao-mayors-seek-palace-support-for-planned-xstrata-mining-project>

[2] Clive Montgomery Wicks and Robert Goodland. "The Tampakan Mine has a High Potential for Loss of Life and High Environmental Damage if the Facilities fail." London Working Group on Mining in the Philippines and members of the Tampakan Forum. March 24, 2012.Web. August 8, 2012. <http://www.tao-pilipinas.org/2012/03/28/why-tampakan-mining-shouldnt-be-allowed-to-proceed/>

[3] "Mindanao Businessmen strongly supporting Sagittarius Mines," The Durian Post Online 15 May 2012 <http://durianpost.wordpress.com/2012/02/24/mindanao-businessmen-strongly-supporting-sagittarius-mines/>

[4] Marvin N. Bennaning, "Mayors slam DENR over ECC," Tempo 20 February 2012 http://www.tempo.com.ph/2012/mayors-slam-denr-over-ecc/

[5] Quiros.

[6] Quiros.

[7] Ibid.

APPENDICES

Exhibit 1 SMI's Sustainable Development Initiatives

Cultural Sustainability (CS) and Sustainable Resettlement Framework	*Sustainable Resettlement Strategy*	*Components:* - *Housing and infrastructure* - *Livelihood* - *Health delivery* - *Education*

Community Environment Initiative	*Reforestation*	*Multisectoral Reforestation Project and Buffer Zone Development Project (launched in 2005 in partnership with host barangays, municipal local governments, NGOs, DENR, schools/universities, religious groups and the communities)*
		- *250,000 seedlings were planted in and around the Tampakan Project area*
		- *Under the Maleh To Kayuh Program (2008):*
		  - *50,000 seedlings were planted (included in the total above)*
		  - *Conducted regular monitoring of the seedlings to determine and improve the survival rates of future reforestation initiatives*

		Study on the forest's flora and fauna and a forest inventory
		Creation of a nursery for seedling propagation
	Research for baseline study	*Joint Research Project with Notre Dame of Marbel University (Updated baseline studies on water quality, health, soil, and sedimentation in areas likely to be impacted by the Project*
		UPLB-Indophil Collaborative Research Project (Forestry students conducted field research on the mountain ecosystems in the Tampakan district)
		Research initiative on the study of vegetation with Leyte State University (LSU conducted 2 botanical research projects)
	Rehabilitation	*3.1 hectares of land which were "disturbed" during drilling operations were rehabilitated and will continue to be monitored*
		To develop Biodiversity and Land Management Plan, a detailed surface model, and a water management plan to address future concerns on climate change and water stress.

	Environmental Studies and Monitoring	*Maintains 37 water monitoring sites, 12 stream flow monitoring system, 6 automatic weather stations, 12 rain gauges, 17 groundwater observation wells*

Community Development Programs	*2007*	*Value formation and leadership trainings* *Livelihood and enterprise development seminars (i.e. food processing for women, goat raising, cultural management of corn and rice for tribal farmers)* *Adult literacy classes in the tribal communities* *Skills training (i.e. carpentry, masonry, welding, building wiring)*
	2008	*Tampakan Social Involvement Program (stakeholder consultation process to identify and define projects)* *Scholarships for 16,325 students from elementary to college* *Supported the salaries of 15 teachers (while LGUs sought budget for these from DepED)* *Access to basic health services provided to over 30,000 community members* *At least 3,000 families enrolled in PhilHealth Program* *Adult literacy programs in partnership with various tribal councils (benefitted 548 adults)*
	2009	*Education program in partnership with the Synergia Foundation* *Livelihood programs hinged on MDGs*
Economic Contribution	*SMI's total economic contribution* from 2007-2009* *est. Php 3.38 million (US$73.9 million)*	**Annual wages; purchase of regional goods and services; taxes and charges paid to government; taxes paid to local councils; power and fuel charges; community partnerships, sponsorships and donations; and, environmental projects.*

Exhibit 2 SMI's Stakeholder Consultation and Engagement activities in 2011

Stakeholder Consultation and Engagement

SMI engages with stakeholder groups at national, regional and local levels through open and transparent consultation. The company's extensive consultation program aims to inform stakeholders of our plans for the proposed Tampakan Project. In 2011, we undertook the following engagement activities:

- More than 9,000 people were engaged through private and public consultations about the Tampakan Project's mine environmental impact studies as part of the Environmental Impact Assessment (EIA) process. SMI consulted with 118 stakeholder groups (involving more than 2,000 individuals) in a series of private consultation meetings as well as approximately 7,000 people in four public meetings in the municipalities of Tampakan, Kiblawan, Malungon and Columbio

- In 2011, 26,000 people attended our mobile Community Information and Resource Center (mCIRC) in the host and surrounding communities. The mCIRC is a communications facility that uses state-of-the-art audio and visual technology to allow stakeholders to visualize the proposed Tampakan Mine and associated infrastructure and gain further information on the Tampakan Project's benefits, potential impacts and SMI's management and mitigation plans

- We continued to operate the interactive Mining Information Center (iMIC), a multimedia interactive display that aims to inform and educate visitors on the use of minerals in daily life, the mine life cycle and the benefits of modern and responsible minerals development. In 2011, approximately 239,000 people visited the iMIC which is located at the SM Mall of Asia in Pasay City

- We provided tours of our key facilities to 1,300 stakeholders interested in the Tampakan Project. The visits demonstrated how the mine would operate and increased understanding of how the mine manages any environmental and social impacts. Local Government Unit officials and community leaders participated in these activities

- We maintained the Stakeholder Consultation, Communication, Consent and Convergence Network (C-net), as a means of recording and responding to community queries regarding the Tampakan Project. Throughout 2011, we received 2,016 inquiries via C-net, with 1,913 queries replied to and acknowledged.

Source: Xstrata Copper "Tampakan Copper–Gold Project Sustainability Report 2011"

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REBUILDING TRUST: THE RAPU-RAPU EXPERIENCE TEACHING NOTE

ABSTRACT

The Rapu-Rapu case discusses the importance of regaining the social license to operate for mining companies, especially in the context of an area with legacy issues left behind by previous operators. The case examines different stakeholder concerns across the stages of mining, and provides an opportunity for participants to evaluate the responsiveness of the company's corporate social responsibility (CSR) program. The case also allows students to look into the process of continuous stakeholder engagement, and its importance in crafting CSR programs.

The case also provides an opening for participants to discuss the development and implementation of an exit strategy that takes into account environmental protection as well as creating sustainable livelihood programs for the community.

The case presents the experience of a company that struggled to gain social acceptance due to legacy issues and environmental problems caused by the previous owners, and shows how well-crafted CSR programs and continuous partnering and engagement with the local community can help a company regain its social license to operate. The case also looks at the steps the company has taken to prepare itself for mine closure and rehabilitation, particularly in terms of environmental protection and economic sustainability for the communities in the impacted affected area.

Key Words: Corporate Social Responsibility in Mining, Rehabilitation and Decommissioning
Economy: Philippines

PRIMARY TOPIC AND USE

Topic Coverage: Stakeholder Engagement, Social License to Operate, Mining Stages Framework, Co-Creation, CSR in preparation for Mine Closure and Rehabilitation

This case primarily covers the importance of securing both regulatory and social license to operate, particularly through understanding the community's needs in a continuous stakeholder engagement process. The discussion will involve the use of the Mining Stages as well as the Co-Creation (Giving Hand) frameworks for CSR during the operations and preparation for mining closure stages. Discussion will also focus on the development of a sustainable exit strategy, which will address not just minimizing the environmental impact but also ensuring the continued economic livelihood of the host community after the mine closes

KEY LEARNING OBJECTIVES

- To discuss the role of the stakeholder engagement process in regaining the Social License to Operate (SLTO) and in creating strategic CSR programs that benefit both the community and the company
- Use the Mining Stages and Co-Creation (Giving Hand) frameworks in creating and examining CSR policies to regain the SLTO
- To provide an understanding of the role of sustainable development during operations and in preparation for closure
- To discuss the objectives, strategies and activities during operations, decommissioning and closure

ASSIGNED STUDY QUESTIONS/ REQUIRED WORK

- How did Rapu-Rapu embed the stakeholder engagement process and CSR in their operations?
- How did Rapu-Rapu effectively regain their social license to operate?
- Who are the different stakeholders, and how did Rapu-Rapu address their concerns?
- How important is sustainable development during operations and in preparation for the mine closure?
- What preparations must be made to ensure that sustainability targets are met before the mine closes?

SUMMARY SESSION PLAN

The session will have three discussion blocks: 1) foundation setting; 2) case discussion; and 3) synthesis.

1. *Foundation Setting (15 mins):* The objective is to clarify the case facts—the importance of the Rapu-Rapu Polymetallic Project (RRPP) to the Philippine mining industry and to the Rapu-Rapu municipality; critical stakeholders that support and oppose the mining operation; the environmental and social initiatives of RRPP; and the current challenges facing the company.
2. *Case Discussion (45 mins)*. The objective of this session block is for the participants to understand how Rapu-Rapu regained their social license to operate against the backdrop of legacy issues from previous mining operations in the area. Participants will use the Mining Stages, Stakeholder engagement and Co-creation frameworks to guide the flow of the discussion. The session block will also cover the importance of developing an exit strategy for mining companies that addresses the community's environmental and economic concerns after the closure of mining operations.
3. *Synthesis (20 mins):* The objective of this session block is to wrap up the case discussions. Reiterate the importance of continuous stakeholder engagement and social license to operate, as well as the importance of an exit strategy that minimizes the negative impact on both environmental and socio-economic aspects of mine closure.

Frameworks for Analysis: The Giving Hand, Mining Stages

In this case, we will use The Giving Hand Framework (Adapted by Herrera, M.B. (2012). *Co-Creation: The Giving Hand* from Googins, B and Mirvis, P. (2011). *Giving Hand*.) to examine RRPP's CSR Framework and Programs, and how the company's various CSR initiatives change over the mine life cycle to respond to the changing concerns of its stakeholders. We will also take a look at how the Stakeholder Engagement Process was continuously implemented by RRPP. Lastly, we will use the Mining Stages framework to further examine

how exactly stakeholder needs change over time, and how a company can anticipate these needs and craft CSR programs accordingly. Please see Appendices for the Framework descriptions.

The Giving Hand first examines Institutional Dynamics, which will necessitate a discussion of the regulatory environment of mining, as well as a discussion of the specific context of the mining case, including legacy issues and various stakeholders (the affected community, the local government, NGOs and Church groups) and their concerns. After that, a discussion of the five aspects of the Giving Hand will follow, to take a look at the various focus areas for community engagement that a company must take into consideration when creating a CSR strategy. The focus areas will also be discussed against the backdrop of the Mining Stages framework, which discusses how stakeholder needs change over the life cycle of mining operations. In particular, the Rapu-Rapu mining case covers most of the entire mining cycle, from Exploration and Extraction, and towards their preparation for decommissioning and rehabilitation in 2014.

Board Work (6 Boards)

Board 1. Background & Institutional Dynamics

1. General Regulatory Environment

Laws

Regulatory agencies

2. Context of Rapu-Rapu site

Background

Change of ownership of RRPP in 2008

Began Exploration 1999, Extraction via open-cut method

Estimated mine life til 2014

Legacy issues

Tailings Spills (Lafayette)

Stakeholders

Community

Local Gov't

Company

Civic & Church groups

Board 2. Institutional Dynamics: RRPP's CSR Set-Up

Vision

We are a Company committed to responsible mining for sustainable development, respecting the interests of all stakeholders in our conduct, and partnering with other sectors to realize socio-economic progress.

Mission

To mine and process ore materials in the safest and most efficient manner, consistent with local and global environmental standards.

To promote the well-being and development of our employees and impact communities.

RRPP's Formal CSR Structure

Environmental Management Department (EMD)

Environmental Protection & Enhancement Office (integrated into EMD)

Community Action, Relations, & Education (CARE) Department (Implement SDMP, CDAP)

Major Components of RRPP's EMS

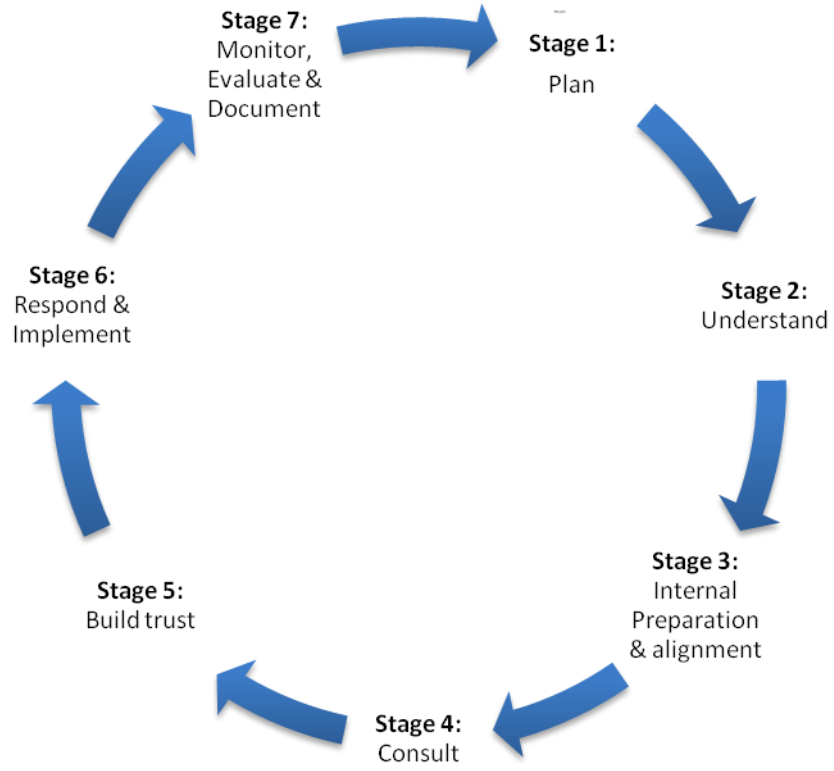
Managing major environmental impact (AMD, pollution, siltation)
Recycling of Waste
Restoration & rehabilitation of land for future use
Environmental monitoring

Board 3. Key Stakeholder Concerns and Stakeholder Engagement Roadmap

Stakeholder	Concerns
Mining Company	Profitability, maintaining a healthy relationship with stakeholders to ensure continuous operations, contribute to local development, compliance to laws and regulations
Government	Monitor compliance to laws, assistance in addressing social issues, environmental protection, ensuring economic benefits
Community	Social development programs and environmental protection.
Mediating Stakeholders	Environmental protection

***Some concerns such as the need for livelihood and legacy issues are more site dependent rather than stage dependent*

Source: Herrera (APEC CSR Train the Trainers Program), 2012



Source: Neil Jeffrey, "Stakeholder Engagement: A Roadmap to Meaningful Engagement."

Board 4. Stages Approach to Sustainable Mining

Engaged and Orderly Approach to Ensuring Sustainable Positive Impact and Mitigation of Negative Impact

Pre-Exploration	**Exploration and Feasibility** *(includes Planning and Designing)*	**Operations** *(includes Construction and Extraction)*	**Decommissioning and Rehabilitation**

Board 5. Giving Hand: How RRPP Addressed CSR Concerns Across Mining Stages

Giving Hand Factors	Mining Stages		
	Exploration	Operations	Closure
Economic/Livelihood			
Education			
Environment			
Health			
Labor			

Board 6. Key Takeaways

Key Messages

Importance of Social License to Operate

Importance of Continuous Stakeholder Engagement

Importance of an exit strategy, and factors to consider (Environmental & Economic)

How can you apply these lessons in your own role as a CSR practitioner?

WRITTEN ANALYSIS OF THE CASE

Institutional Dynamics

Regulatory Environment: Mining in the Philippines

The Philippines has substantial mineral reserves all over the archipelago, with mining being a major contributor to the economy. The industry peaked in the 1970s, with its share of total exports at 20%, but this share has been declining due to a drop in international metal prices. Nonetheless, the industry continues to generate substantial employment for Filipinos.

The Philippine regulatory environment for mining is largely governed by the Philippine Mining Act (PMA) of 1995, which has been described as the most foreign-friendly mining policy

among a survey of 70 countries that have liberalized legislation to attract foreign investment (SAPRIN 2001).). Although the act retains the 60-40 Filipino-foreign ownership requirement for companies mining under the Mine Processing Sharing Agreements, it enables foreign corporations to undertake mining activities and to acquire a 100% stake in mineral processing operations.

The main government agency responsible for approving and monitoring mining operations is the Department of Environment and Natural Resources (DENR), which is constitutionally mandated to promote environmental protection. Other government agencies under the DENR are the Mines and Geosciences Bureau (MGB), the Environmental Management Bureau (EMB), and the Pollution Adjudication Board (PAB).

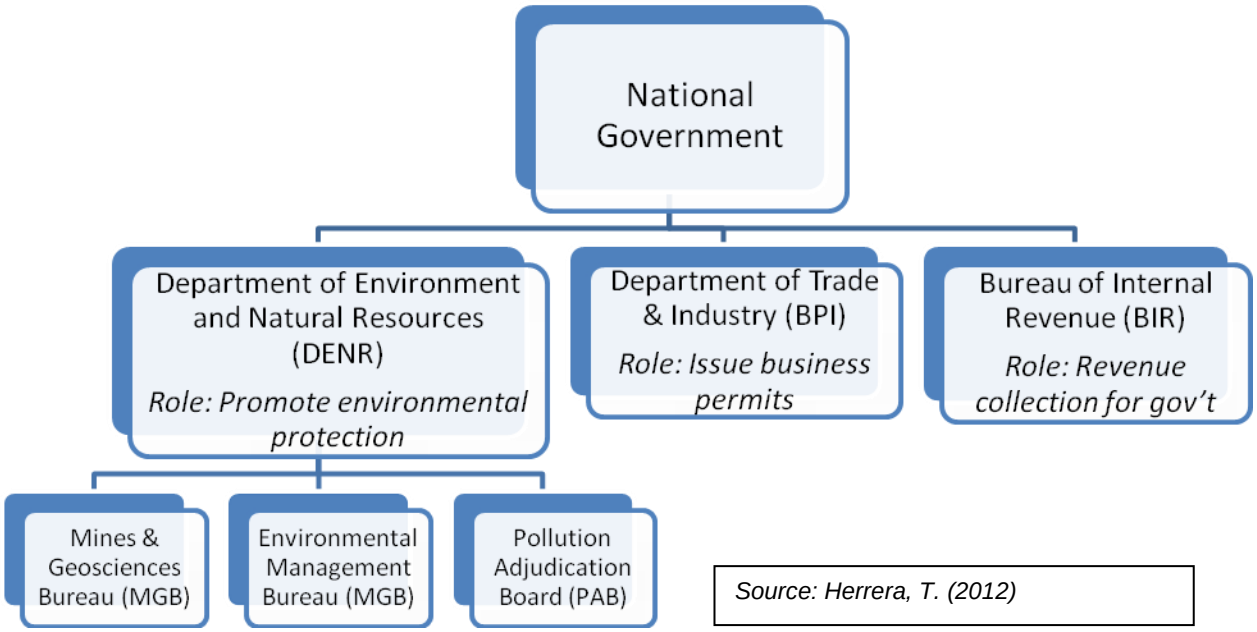


Figure 1. National Government Agencies and Roles

The Implementing Rules and Regulations (IRR) of the Mining Act, covered by DENR Administrative Order No. 96-40, adheres to the principles of sustainable development, and takes into consideration both economics and the environment. The IRR follows current best practices in environment management systems (EMS).

The Mining Act contains provisions that aim to safeguard the interests of the host community, the government and the environment. The law requires mining firms to secure prior informed consent from the communities directly affected by mining operations even before government agencies can approve mineral agreements and issue environmental permits. The Mining Act also encourages mining companies to use best practices for sustainable development. Companies are required to complete and submit an environmental impact statement (EIS), an environmental compliance certificate (ECC), an environmental protection and enhancement program (EPEP), and an environmental work program (EWP). It also mandates the formation of multipartite monitoring teams (MMT) to check the compliance of mining firms with their plans to manage environmental risks. The law also requires mining firms to have a social development management program (SDMP) to be funded from 1.5% of operating expenses. In addition, the law ensures that mining projects give priority to hiring from local communities to fill their human resource requirements.

Table 1.Selected Mining Company Requirements Mandated by Philippine Law

Revenue	-1% of milling and mining costs must be allocated to social development in the host area -1% of annual gross revenues paid as royalties to affected indigenous communities
Environment	-Submission of an environmental impact statement -Environmental compliance certificate -Environmental protection and enhancement program (EPEP) -Formation of a multi-partite monitoring team that would audit and ensure mining company's compliance with the law, particularly in terms of the EPEP
Local host communities	-Mining companies must secure free, prior and informed consent from affected communities prior to mining operations -Social Development Program (SDMP) for local community to be funded from 1.5% of OpEx -Prioritize hiring manpower from local communities

In terms of environmental protection, the Mining Act has three main objectives. First, that suitable environmental conditions are maintained at every stage of mining operations. The law defines specific standards to minimize water, air and noise pollution. Second, that mined lands must remain usable after mining operations. It requires that the land be restored to its original state in terms of usefulness or that the land be prepared for a predetermined purpose agreed upon with the community and the local government unit. Third, the law demands that the traditions of indigenous cultural communities toward protecting the environment be respected.

The Rapu-Rapu Polymetallic Project: Background and Legacy Issues

The RRPP was the first polymetallic and first zinc-producing mine established in the Philippines under the Mining Act. The mine site is located on the island of Rapu-Rapu in the province of Albay, located some 350km southeast of Manila. The island of Rapu-Rapu has a land area of 5,587 hectares (ha), and has a diverse ecosystem with abundant flora and fauna, rich marine biodiversity, and considerable mineral resources. The project site, which occupies a total of 180ha, is located at the eastern most tip of the island and covers 3.22% of the island.

The RRPP is jointly owned and managed by Rapu-Rapu Minerals, Inc. (RRMI) and Rapu-Rapu Processing, Inc. (RRPI). RRMI is responsible for extraction, while RRPI processes the ores into copper and zinc, with gold and silver by-products. With an investment of over US$100 million, it is also the largest private venture in the province of Albay. The project employs almost a thousand employees, mostly locals.

Before operations started, the residents of Rapu-Rapu island and other nearby areas such as Sorsogon and Albay were hesitant about the project because of their previous experiences with other mining companies. Concerned groups were afraid that mining operations would damage the fragile ecosystem of the island.

Lafayette Mining, an Australian company, originally owned the project in 1999, with its acquisition of the Ungay-Malobago pit, which had a mine life of about six years. Despite environmental concerns within the community, the government granted Lafayette an ECC on 12 July 2001, and its environmental protection and enhancement program was approved in April 2002.

Mining and processing began in 2005 but were marred by two mine tailing spills that led to a suspension of operations and an upsurge of anti-mining sentiment from local civic and church groups.

The first spill occurred on 11 October 2005 due to the breakdown of the main pump that transported cyanide-contaminated wastewater from a detoxification plant to a mine-tailings storage dam. The pump failure caused the mine wastewater to back-flow into an "events pond" designed to contain mine-tailings spills during emergencies. However, because the events pond was already 40% full, 20 tons of cyanide-contaminated slurries spilled beyond the premises of the gold processing plant and made its way to two nearby creeks, which drained into Albay Gulf. In the afternoon of the same day, the villagers collected two kilos of dead fish, crustaceans and other marine life on the mouth of the creeks.

The damage was contained as the slurries were trapped in gabions and silt fences before draining out into the gulf. Lafayette, however, was unable to respond quickly to allay the community's fears because they were waiting for their corporate headquarters in Australia to release an official statement. In addition, the company did not have proper structures in place to continuously engage with the community and include them in the dialogue and planning for sustainable development in terms of safeguarding the environment as well as the economic development of Rapu-Rapu.

The second mine spill happened shortly after, on 31 October 2005, when heavy rainfall caused the lower-tailings storage facility to reach critical levels. Fearing that the mine-tailings dam would give way, the company's management diverted the wastewater to Ungay Creek and Hollowstone Gully. Locals collected two sacks of dead fish, crustaceans and other marine life along the creeks the following morning.

The two tailings spills intensified the anti-mining sentiments of environmental and church groups in the area. Both mining incidents and the resulting fish scare united anti-mining advocates who called for the closure of the mine.

The Aftermath of the Tailings Spills

Sixty percent of the households in both Rapu-Rapu and the neighboring Prieto Diaz depend on fishing as a primary livelihood. Majority of families engage in small-scale and subsistence fishing. After the tailings spills, a number of fishermen on the island claimed that their catch declined.

Fishermen from Barangay Binosawan said that before Lafayette's operations in Rapu-Rapu, their boat of three to four crew members used to catch about 70 pieces of blue marlin a year. In 2005 and 2006, they averaged only 20 pieces. In neighboring Barangay Brillante, fishermen said a boat used to average four pieces of fish per trip, but after the tailings spills, averages were down to two or fewer. Many fishermen reduced the number of days spent out at sea due to steep declines in catch size, and a number of them dropped out of the industry altogether, taking jobs as pedicab drivers, carpenters, and doing other odd jobs to make ends meet. Fish vendors also found themselves indirectly affected by the tailings spills, as many consumers became wary of buying fish caught near Rapu-Rapu, driving prices down by about 60%.

Farmers on the island were also affected by the company's operations, as they noted a marked decrease in water supply after Lafayette began mining in the area. Rapu-Rapu is a small island with a limited supply of freshwater, and this supply was further diverted to Lafayette's operations. Water supply for domestic needs also became scarce, with residents reporting difficulty in sourcing water for drinking and washing, especially as they feared cyanide contamination in their tap water supply.

The aftermath of the spills saw an increasing number of locals opposing Lafayette's operations, leading to more soldiers and policemen deployed to the area, in addition to 150 militiamen in civilian clothes.

Following the two cyanide spills and the strong public outcry, the government began an investigation into the incidents and Rapu-Rapu's operations. The Pollution Adjudication Board ruled that RRPI had violated the Clean Water Act. Mining operations were first suspended after the 11 October incident, then again in November 2005. In January 2006, the DENR suspended RRPI's operations and imposed a PhP10.4 million fine on RRPI. The work stoppage translated to monthly losses of PhP150 million for the company, on top of rehabilitation costs that increased from US$2.8 million to US$5 million. In June 2006, the government allowed a three-stage test run that spanned about 150 days. The DENR eventually pronounced that the company was in a better position to operate after measures were in place to prevent the occurrence of future spills.

In April 2008, Philco acquired all Lafayette Mining Ltd. shares and revitalized production through the infusion of capital and changes in management. RRMI continues to be a majority Filipino-owned company, while RRPI is wholly owned by KMP Resources.

In October 2008, three shareholders, LG International (LGI), Korea Resources Corp. (KORES), and Malaysia Smelting Corp. (MSC) invested in RRPP and restarted its operations, guided by these commitments: 1) adherence to responsible mining for sustainable development; 2) respect the interest of all stakeholders; and 3) develop partnerships to realize socio-economic progress for the economy.

The ore deposit in the Ungay-Malobago mine is estimated to last until 2013 or 2014.

Rebuilding trust through effective CSR

Rapu-Rapu Polymetallic Project's CSR Framework

RRPP's commitment to sustainable development and socio-economic progress is embedded in the company's Vision-Mission statement. The company's main thrusts focus on the environment and community development of its impact communities.

The company has two departments that carry out its CSR initiatives – the Environmental Management Department (EMD) and the Community Action, Relations, and Education (CARE) Department. The heads of both departments report directly to the President and are in the company's executive committee. RRPP also has a separate Safety Department in charge of the occupational health and safety of its employees.

Table 2.RRPP's Vision Mission

Vision
We are a Company committed to responsible mining for sustainable development, respecting the interests of all stakeholders in our conduct, and partnering with other sectors to realize socio-economic progress.
Mission
To mine and process ore materials in the safest and most efficient manner, consistent with local and global environmental standards. *To promote the well-being and development of our employees and impact communities.*

Regaining the Social License to Operate: Challenges for Rapu-Rapu Polymetallic

The RRPP faced many challenges in regaining the trust of the community, especially against the backdrop of legacy issues and strong opposition from both Church and civic groups in

the area. The manager of the company's Community Action, Relations, and Education (CARE) Department, Marilanie Lanuzo, said communication and partnering with the community were key in their efforts to regain the social license to operate in the area. Over time, through communication and education, RRPP was able to talk to the people and understand their needs.

One of the company's initial CSR obstacles was the mistaken perception of the people that the company's role was to provide funding, and not to be a partner in development. In the beginning, the perception was that the company was responsible for funding whatever projects the community wished to pursue. Most of the initial infrastructure requests that the company received were for barangay halls, which, from a CSR perspective, might not be as important as other infrastructure investments for the community (such as access roads, electrification or classrooms).

Through their various CSR initiatives, the company has succeeded in getting the support of the community and they now work together to ensure environmental protection and sustainable local development. In the end, because the company gained the trust of the communities, locals supported Rapu-Rapu and defended it against the claims of anti-mining groups.

Engaged and Orderly Approach to Ensuring Sustainable Positive Impact and Mitigation of Negative Impact

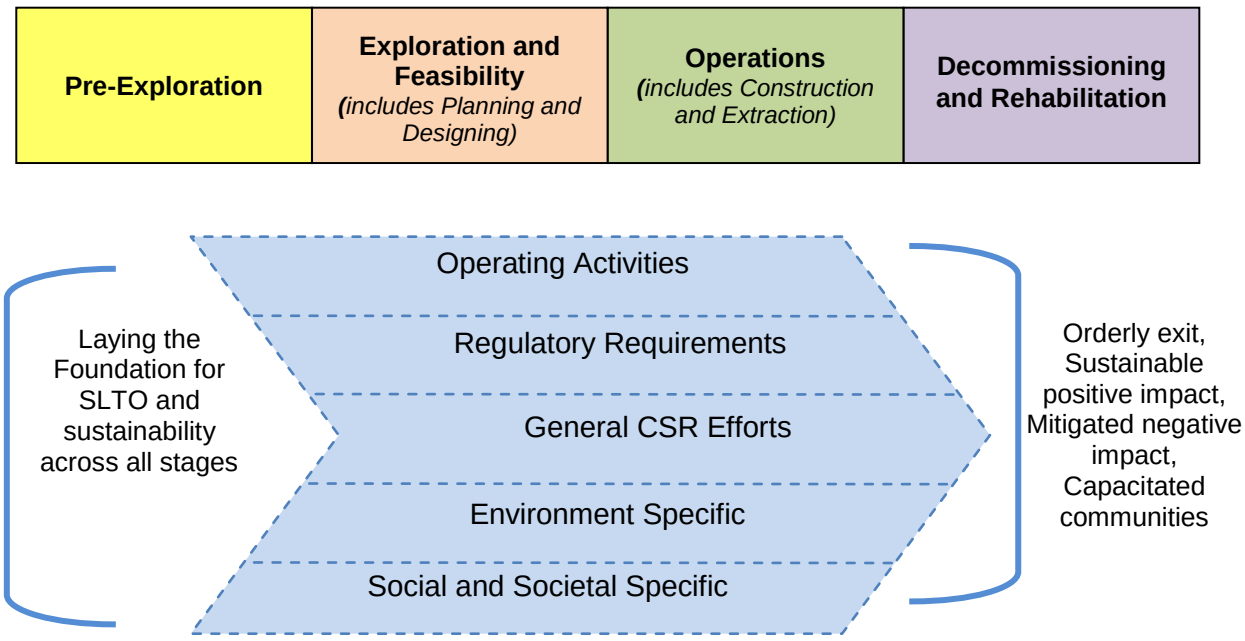


Figure 2. THE STAGES APPROACH TO SUSTAINABLE MINING

Stages Approach to Mining
Rapu-Rapu's Operations, and Preparations for Decommissioning

The case facts show that the company's current management incorporates sustainability efforts in its operations and compliance with regulatory requirements, which form the foundation for their social license to operate across the different mining stages. The following discussion will more closely examine Rapu-Rapu's environmental and social CSR initiatives in their operations as well as in their preparations for closure.

To more closely examine the importance of partnership and co-creation in mining CSR and sustainability, we will be examining Rapu-Rapu's environment-specific and social-specific CSR initiatives using the Giving Hand framework, which maintains the environment as a

focus area, and further breaks down social or societal CSR initiatives into the categories of economic/livelihood, education, health, and labor.

Co-Creation: The Giving Hand Factors
(Environment, Economic/Livelihood, Education, Health, Labor)
The Giving Hand Factors: RRPP's Commitment to the Environment
After acquiring the RRPP from Lafayette, the new management was committed to ensuring that the negative impact of mining operations would be minimized, particularly with regard to the environment.

The company integrated the Environmental Protection and Enhancement Office (EPEO) into the functions of their Environmental Management Department (EMD).
The Project's Environmental Management Systems covered four major areas of responsibility:

- Managing the major environmental impacts (acid mine drainage (AMD), water pollution, and siltation), managing exposure to hazardous chemicals and solid waste, and controlling air pollution
- Recycling of waste: water, potential acid forming and non-acid forming
- Undertaking reforestation as a way of restoring the land as close as possible to its original state and rehabilitating it for future use, and
- Environmental monitoring to ensure compliance with standards and to anticipate potential problems before they reach critical levels: air and noise level, sedimentation, and biodiversity monitoring.

All in all, the company's policies aimed to ensure that even after mining operations ceased, the damage to the environment would be minimized and the local community would be able to continue using and enjoying the bounty of their land.

Table 3.RRPP's CSR initiatives grouped according to their Environmental CSR Thrusts

Managing Major Environmental Impact
Reforestation *Marine and wildlife conservation programs (rescue of marine animals, management of starfish infestation in coral reefs), Community education on conservation*
Recycling Waste
Solid waste management program in accordance with RA 9003 (*Ecological Solid Waste Management Act of 2000)* *Cyanide wastes disposed of in a dedicated pit in tailings storage facilirt* *Waste is composted and used in plant nursery and reforestation areas*
Reforestation & Rehabilitation of Land
Progressive planting of cover crops and trees for biological diversity and slope stability (Rapu-Rapu has mountainous terrain)
Environmental Monitoring
EMS beyond compliance, assumes worst case scenario *PH self-monitoring to prevent AMD* *Pollution control monitoring*
Others
Participation in World Environment Day, World Water Day, Earth Day

Rapu-Rapu has been recognized for its environmental protection initiatives as it consistently goes beyond mere regulatory compliance. Both companies under the RRPP have been ISO 14001 certified. In its Reassessment Audit in May 2010, the project passed with zero nonconformity issues, and in 2009 it was recognized for its efforts when two of its personnel were awarded Outstanding Pollution Control Officer and Most Outstanding Mining Engineer for Mine Management.

Stakeholder Engagement

Stakeholder engagement is an important component of any CSR strategy. Neil Jeffrey, in his book "Stakeholder Engagement: A Road Map to Meaningful Engagement", states that:

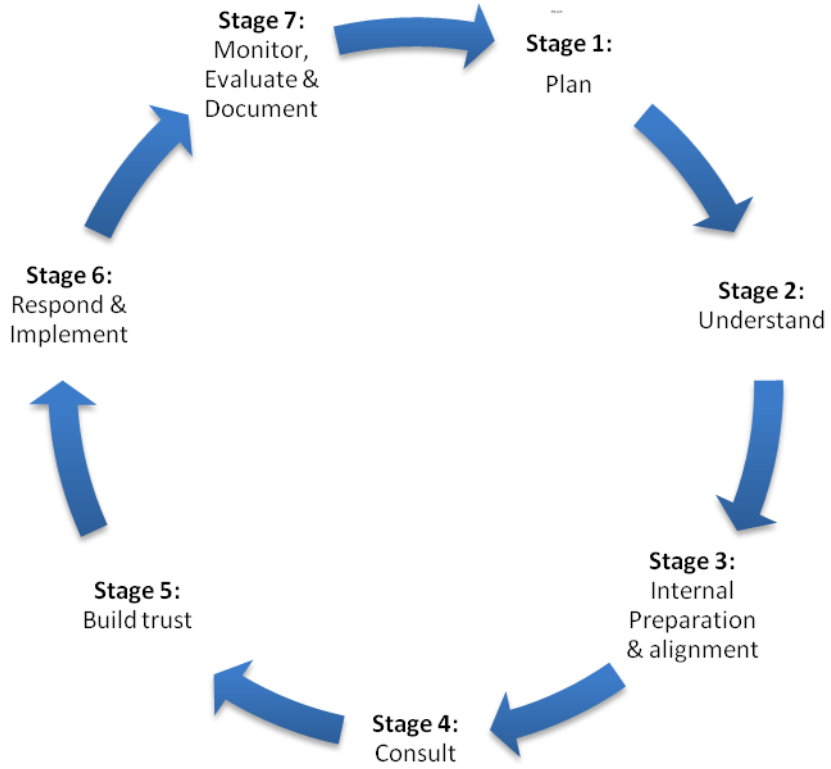
> The development of meaningful relations should add value to the organization's operations by: reducing constraints on business and increasing the license to operate; allowing it to plan for the future, minimizing risks and enhancing opportunities by better understanding the fast-changing PESTE (Political, Economic, Social, Technological, Environment) context; and, enabling it to better understand critics and potentially refute, convince or address criticisms. Furthermore it will enable organizations to reassure stakeholders that they are on top of issues, and in some cases, be essential for solving problems. (11)

When it comes to stakeholder engagement, it would be best to engage stakeholders early on in the process for a company to be proactive, rather than reactive. This is key particularly in the context of mining where a company's operations come with attendant risks that can have a huge impact on the community in which it operates.

> Situations arise when organizations do not actively engage but are forced to do so by the demands of society as a result of a crisis situation. In response, organizations employ crisis management techniques, and are often forced into a defensive dialogue with stakeholders, leading to a significant and long lasting loss of reputation. This type of interaction is often antagonistic and damaging of trust. (Jeffreys 8)

One of the benefits of meaningful stakeholder engagement, is that it allows companies to plan for the future, minimize risks, and enhance opportunities. A look into the process of meaningful stakeholder engagement (Figure 4) shows how input from stakeholders allows for aids the firm in crafting relevant and community-specific programs, creating value for both the company and its stakeholders.

Figure 4. The Process Flow of Stakeholder Engagement



Source: Neil Jeffrey, "Stakeholder Engagement: A Roadmap to Meaningful Engagement."

Meaningful stakeholder engagement is particularly important for mining firms, as they often face negative perceptions associated with mining. Engagement activities provide mining companies with a venue to refute misconceptions and overturn negative perceptions towards mining and mining projects.

RRPP works closely with the community through all the stages of the stakeholder engagement cycle, ensuring that they understand the specific needs of the people when crafting projects their Social Development Management Plan (SDMP) and Community Development Assistance Programs (CDAP).

Social/Societal Specific Initiatives: The SDMP and the CDAP

Aside from minimizing its environmental footprint, the company is also committed to helping the community. The law requires that the company implement a Social Development Management Plan (SDMP). For RRPP, the purpose of the SDMP is to ensure that the host community will enjoy an improved quality of life through economic development and infrastructure investments that will benefit them even after the mine ceases operations. RRPP believes that without basic infrastructure and services such as roads, power, and potable water, local development will be difficult. Early on in the implementation of its SDMP, these programs proved to be of primary importance. By providing these basic infrastructure investments that benefit both the mining operations and the community, the project has already contributed to the improvement of the quality of life of the residents.

In addition, although the SDMP only needs to cover the indirect and direct impact areas, the company went beyond regulatory compliance when it initiated Community Development Assistance Programs (CDAP) that cover other mining stakeholders. Unlike the SDMP, the CDAP is not mandated by law and the distribution of resources is based on the needs of the community.

The CDAP: Beyond Mandated CSR to Rebuild Trust

The RRPP, through the CDAP and usually in partnership with the local government, government agencies and concerned groups, undertakes and supports activities and projects that benefit (i) the other barangays in the municipality of Rapu-Rapu outside the SDMP, and (ii) the coastal barangays of Legazpi City and Sorsogon Province located around the Albay Gulf, and facing the mining project in the Island of Rapu-Rapu.

Beyond compliance and on a voluntary basis, RRPP provides funds, logistic support, and manpower skills to implement the programs guided by the United Nations Millennium Development Goals and the needs of the residents. Since 2006, some of the programs that have been implemented are the following: Feeding Programs, Education and Clean & Green programs. The CDAP plays a crucial role in rebuilding the trust between the government, the community and the company. After the mine-tailings spill, the company needed to show its commitment to the environment and the community's development. The company's efforts paid off, and the Rapu-Rapu Municipal Council passed Resolution 255-2009 commending RRMI/RRPI "for having an empowered community-based consultative-transparent implementation of the CDAP Scholarship Program in the Municipality of Rapu-Rapu".

Co-Creation and Partnership: Implementing SDMP and the CDAP

The company works closely with the community in the planning and implementation of the SDMP.

The community prepares project proposals and plans based on the SDMP budget allocations from RRPP. One-year and five-year development plans are reviewed and approved, and the use of the funding allocation to the SDMP is audited annually. The SDMP is tightly regulated, while the CDAP allocations are more flexible due to the more ad hoc nature of the projects in the program.

The company recognizes the need for the buy-in of other stakeholders as well as their assistance in implementing the CDAP program, because they take into consideration other stakeholders beyond the six direct impact communities mandated by law. To develop the human resource capabilities of the local communities, RRPP gives capacity-building programs and technical support. Given the size of the areas covered, the company needs to work with other organizations to implement the programs that ultimately deliver long-term benefits to the community.

To further empower local residents, the company helped organize people's organizations in the area. Members of the community were also given seminars on cooperative development. Ten community meetings were then organized before the residents signed up for membership. The purpose of these meetings was to ensure that the members of the community had enough information to make informed decisions regarding membership. One hundred members initially signed up to join the organization. Through seminars, the members learned to raise the initial amount required by law to form a cooperative.

The Giving Hand Factors: Economic/Livelihood

<u>Employment Generation</u>

More than half or 53% of the total number of project employees are residents of the direct and indirect impact communities in the Island of Rapu-Rapu. Another 15% reside outside these areas but within the municipality of Rapu-Rapu, with 68% of all employees coming from the island. Due to the employment opportunities provided by the mining project, the population in the impact areas has grown.

The company has also made investments in alternative livelihood education programs and local industries to ensure sustained economic development even after mining operations shut down in Rapu-Rapu.

Infrastructure

Rapu-Rapu has also made significant investments in infrastructure that will provide benefits to the community even after the mine closes. The key projects are enumerated in the table below.

Table 3.RRPP's Infrastructure Investments

Electrification
Free electricity through the distribution of generator sets and diesel fuel to direct impact areas
Repair and maintenance of the facilities and power lines, and the honoraria of the genset operators
Assistance to be realigned with the livelihood projects of the three direct impact areas
Construction of All-Weather Barangay Access Road
An all-weather road, constructed and maintained by the project links and allows travel to the different barangays when it is not safe to reach the coastal barangays using boats
Others
Construction/Renovation of Chapels, Community Multi-Purpose Halls, and Classrooms

The Giving Hand Factors: Education

The education development programs of RRPP focus primarily on training and investments in human capital development. The company has partnered with the Technical and Educational Skills Development Authority (TESDA), a government agency, to run Vocational/Technical Training programs. This project was started early on during the implementation of CDAP and SDMP with the goal of equipping local residents with skills for employment in the project and with other training for them to take advantage of other employment opportunities in the nearby cities and communities. This training gives residents the skills to pursue alternative sources of livelihood after mining operations shut down.

In addition, the company also offers scholarships, runs teachers' training programs and donates school supplies to the communities in which it operates.

The Giving Hand Factors: Health

The company did not make significant investments in health services, which is one avenue for improvement in its CSR programs. It's possible that the communities did not include investments in health in their development programs despite the poor access to health facilities in the area. What this shows is that although in theory there are many factors for consideration in the implementation of CSR, in practice, resources are limited and the community must decide which projects should be given priority.

The Giving Hand Factors: Labor

Beyond generating significant employment for residents, the RRPP puts a premium on the safety of its employees.

The company adapted the Occupational Health and Safety Assessment Series (OHSAS 8001:2007) Standard to implement, maintain, and continually improve the existing OH&S

management system in line with the Mining Act. RRPP aims to operate in a zero-accident workplace and to ensure the safety of employees, contractors, visitors, communities and stakeholders. The company was awarded the 2010 SOPI Industrial Safety Award of Honor for achieving 4,387,542 man-hours without lost time accidents.

SESSION PLAN DETAILS AND KEY MESSAGES

- Case facts: Background and Institutional Dynamics
  Key message: Acquiring the Social License to Operate is imperative for mining companies, especially in areas with strong anti-mining sentiments due to legacy issues from previous operators. To regain trust, it is important for the company to consider the various stakeholders and their specific needs in crafting responsive CSR programs.
  General Regulatory Environment
  - Laws
  - Regulatory Agencies

  The Rapu-Rapu Site
  - Exploration in 1999, Extraction via open-cut method
  - Mine life until 2014
  - Change of ownership in 2008

  Legacy issues
  - Tailings Spills, Aftermath of tailings spills
  - Strong Anti-mining sentiments in the community

  Major Stakeholders, Concerns and Stakeholder Engagement Processes
  - Community
  - Local Government
  - Company
  - Civic & Church groups

  Key Challenges of RRPP
  - Regaining Trust
  - CSR implementation during operations
  - Preparing for mine closure – Environmental & Economic Aspects

  RRPP's CSR Set-up
  - Vision Mission
  - Internal Departments
  - Environmental Management Department (EMD)
  - Community Action, Relations, & Education (CARE) Department

- Introduction of Frameworks
  Key objective: Briefly discuss/give an overview of The Giving Hand and Stages Frameworks

- Case Discussion
  Key objective: Using the Giving Hand and Stages frameworks, discuss how RRPP regained their social license to operate. Also discuss how RRPP is preparing for the eventual closure of the mine, especially in terms of minimizing the negative environmental and economic impact, and maximizing the long-term gains of the community.

  Key messages: Counterparting and continuous stakeholder engagement were vital in helping RRPP craft strategic and responsive CSR programs, which ultimately led to regaining the trust of the community. CSR must be embedded

across all stages of mining operations, even until closure and rehabilitation, with the end goal of leaving communities with an improved quality of life even after mining operations.

- Environmental Impact Management Programs
- Economic/Social Impact Management Programs
  - SDMP & CDAP – the role of Counterparting in crafting CSR programs
  - Giving Hand Factors & RRPP's programs/initiatives
    - Economic/Livelihood
    - Education
    - Health
    - Labor

- Key Lessons and Application
  - Importance of Social License to Operate
  - Importance of Continuous Stakeholder Engagement
  - Importance of an exit strategy, and factors to consider (Environmental and Economic)
  - How can you apply these lessons in your own role as a CSR practitioner?

SUMMARY/CONCLUSIONS

The Rapu-Rapu case shows the importance of partnering with the community, local civic groups, and government organizations to create shared value that will benefit the company and contribute to the both the present and the long-term development of the host area. It shows the importance of open and continuous communication among stakeholders, and the value of empowering communities to take active part in the conception and implementation of CSR programs that cater to their specific needs. At the same time, the case shows that CSR is crucial to the company's operations because it helps the company gain the social license to operate, which is particularly important in areas with strong anti-mining sentiments.

The case also shows the importance of an exit strategy, where mining companies minimize the negative environmental and economic impacts of mining, and contribute to the long-term sustainable development of the community.

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After 2005 tragedy, Rapu-Rapu mine gets safety boost

WEDNESDAY, 19 SEPTEMBER 2012 19:10 JONATHAN L. MAYUGA / REPORTER http://businessmirror.com.ph/home/regions/33010-after-2005-tragedy-rapu-rapu-mine-gets-safety-boost

Bicolanos and environmental groups demand permanent closure of La Fayette mining in Rapu-Rapu
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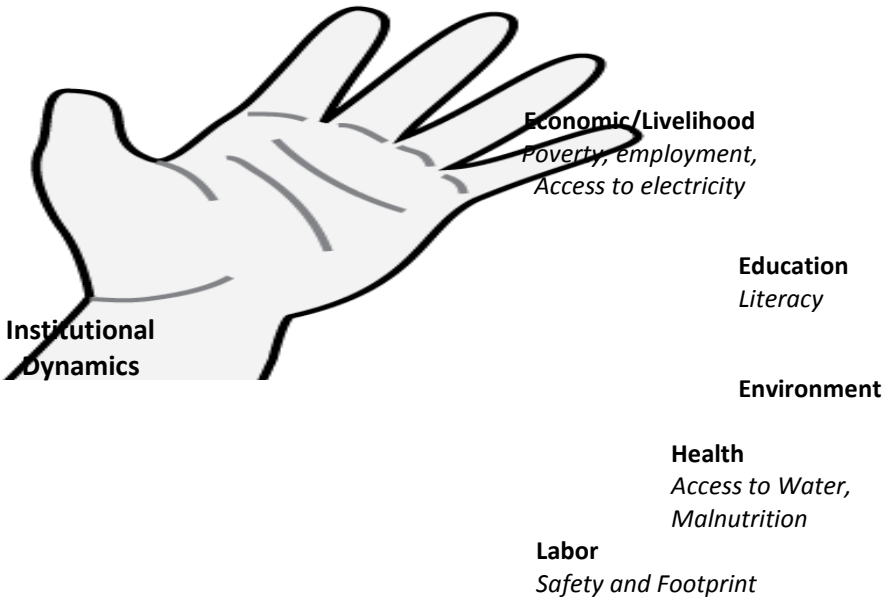
APPENDICES

APPENDIX A. The Giving Hand

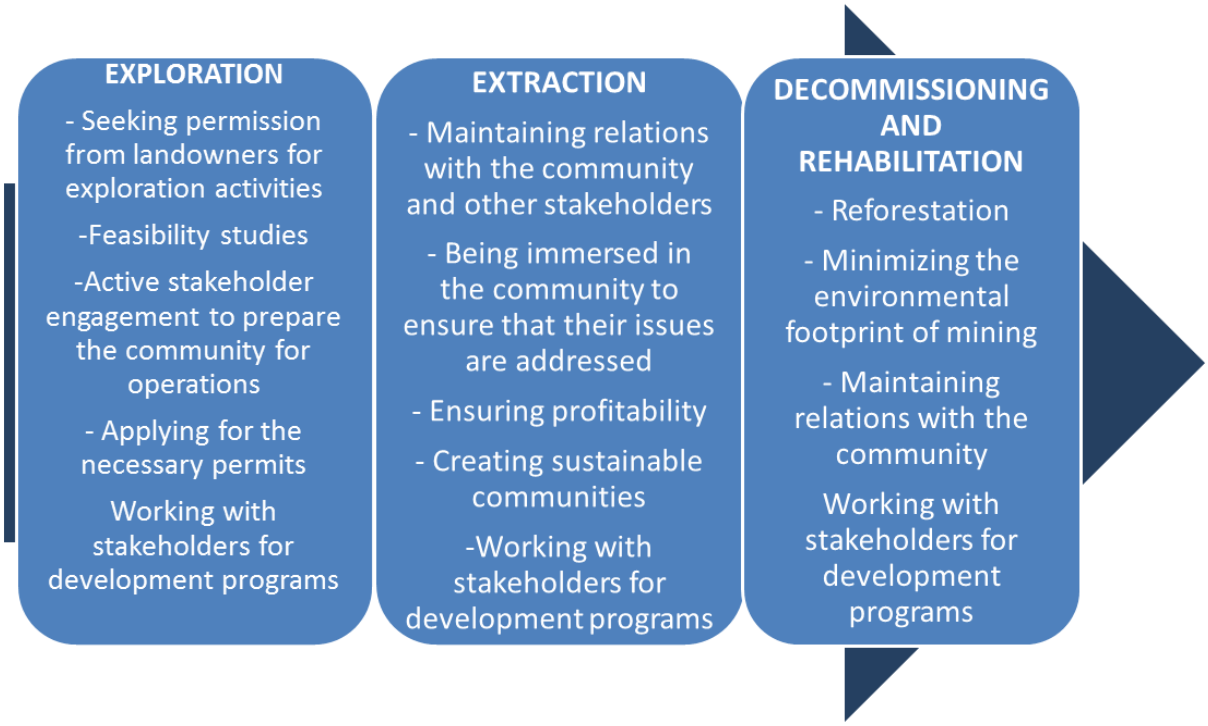
CO-CREATION: THE GIVING HAND



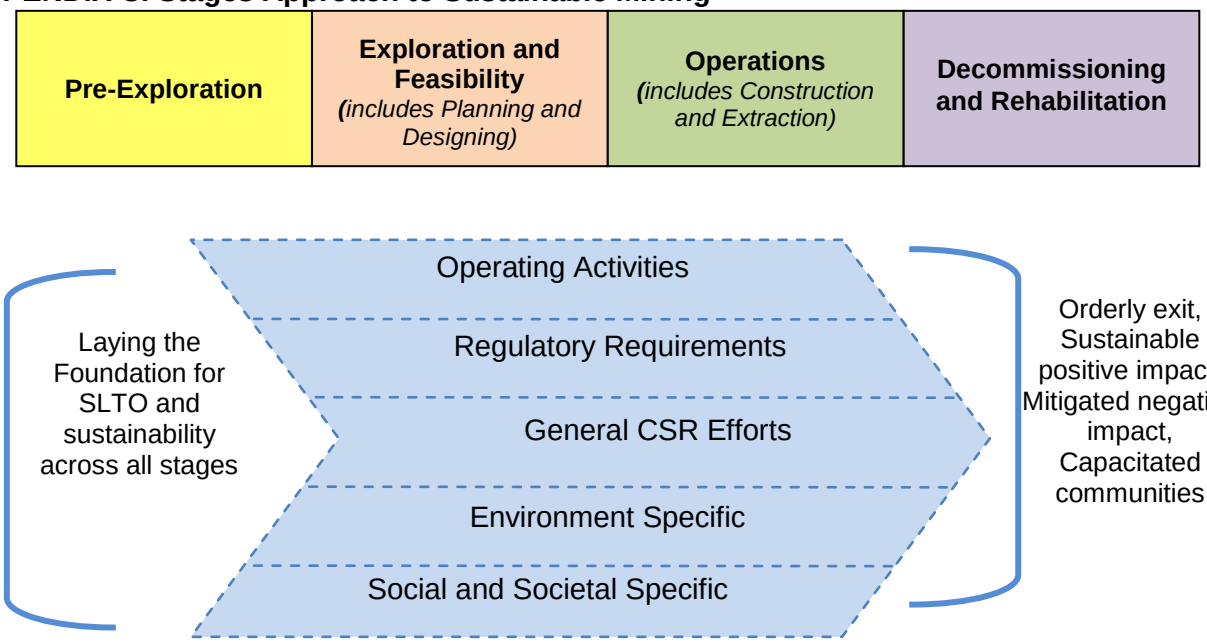
Source: Adapted by Herrera, M.B. (2012). *Counterparting: Giving Hand* from Googins, B and Mirvis, P. (2011). *Giving Hand*.

This framework is based on the original giving hand framework (Googins and Mirvis, 2011) which shows the five key focus areas on which companies can concentrate their CSR efforts. These key focus areas are: economic development, education, environment, health and labor. The revised framework introduces the idea of "counterparting", which is particularly important in ensuring sustainability of community engagement efforts. Counterparting refers to the idea of the receiving hand of the involved stakeholder. As a "counterparty", the involved stakeholder becomes collaborator and co-creator, rather than simply beneficiary. As a co-creator of a new future, the counterparty is in a position to sustain programs without creating dependence on the corporation. This can be particularly important in certain situations – e.g. in the mining industry post-decommissioning. Institutional capacity-building then becomes the foundation for the giving hand.

APPENDIX B. Mining Company Responsibilities Across Different Mining Stages



APPENDIX C. Stages Approach to Sustainable Mining



ANTAMINA AND THE MINING FUND
TEACHING NOTE

ABSTRACT

More and more companies are starting to view Corporate Social Responsibility (CSR) as an integral part of their business strategy. Engaging in CSR has moved beyond philanthropy, and has been recognized as an effective tool to facilitate business sustainability. There is no "one size fits all" CSR strategy, and to tailor fit it to respond to the needs of the company, it is essential to look into the internal and external factors that affect a company's operations. Engaging in CSR is especially beneficial, if not necessary for mining companies, as they more often than not have to contend with many issues and challenges. Best practices can help reverse legacy issues and opposition to mining projects. The business of mining is unique in that it has a life cycle with a definite end. This end entails rehabilitating areas "disturbed" by mining operations and mitigating the negative effects that the mine closure will have on the community. A CSR strategy for mining should include plans for all the stages of the mine life cycle. The case presents the experience of the Compania Minera Antamina (or Antamina), the company in charge of mining one of the largest copper zinc ore deposits in the world, located in the mountain ranges of Ancash, Peru. Antamina is currently in the extraction stage. An agreement entered into between the government and mining companies has resulted in the establishment of the Antamina Mining Fund (AMF). Various programs for the community were undertaken. These efforts, though, have seemingly engendered a culture of dependence (to the mining firm) in the affected communities. The success of sustainable development programs and the crafting of a concrete closure program are critical to preparing the community to survive the eventual shut down of the mining project. In addition, monitoring and evaluation of these CSR programs is also in order, to allow the company to determine whether the programs are yielding the desired outcomes, and allow them and their partners to make changes if necessary.

Key words: Corporate social responsibility, Mining, Decommissioning and rehabilitation, Monitoring and evaluation

Economy: Peru

PRIMARY TOPIC AND USE

The case focuses on the pre-exploration, exploration and extraction stages of the mine life cycle, and the potential problems that mining companies may face during these stages. Specifically, the case could be used to discuss the following:

- Potential issues and challenges in the pre-exploration, exploration, and extraction stages
- Sustainability of CSR Programs
- Meeting stakeholders' expectation while establishing limits to dependency
- Monitoring and evaluating/measuring the impact of mining companies' CSR programs
- Exit strategy/ decommissioning and rehabilitation plans

The case of Antamina can be used in the discussion of CSR in management courses, and for programs and capacity-building seminars for stakeholders in the mining industry. Since the case presents the experience of a mining company from pre-exploration to extraction stage, it could be used with the following case studies when discussion on CSR in all the stages of the mine life cycle is necessary:

- SMI and the Blaans: A Sustainable Development Alliance (Pre-exploration, Exploration)
- Philex Mining Corporation, Multi-site Implementation of CSR (Exploration, Extraction, Rehabilitation)
- Rebuilding the Trust: The Rapu Rapu Experience (Extraction)

This case study could also be used in the discussion of the following topics:

- Dealing with or reversing legacy issues through CSR practices and initiatives;
- Government providing fiscal rewards and incentives to the mining industry; and
- Importance of institutional capacity building (local governments, public health professionals, public education professionals).

PREREQUISITES

To be able to fully appreciate the case, and meet its learning objectives, students or participants must be familiar with the following:

The Mine Life Cycle/Stages in Mining -- with focus on the pre-exploration, exploration, and extraction stages

Mining Footprint Analysis – analyzing the social and environmental impact of the project; identifying stakeholders

Stakeholder Assessment -- stakeholder analysis (interests and concerns) and setting priorities

Performance monitoring in all stages of the mine life cycle

KEY LEARNING OBJECTIVES

At the end of the discussion, participants should be able to:

- Understand that a CSR strategy cannot be created in a vacuum; external and internal forces must be taken into account in developing a CSR strategy;
- Understand the need to avoid engendering a culture of dependence in the host communities;
- Understand the importance of monitoring and evaluating CSR programs; and
- Understand the need for concrete decommissioning and rehabilitation plans and a sustainable exit strategy.

ASSIGNED STUDY QUESTIONS/ REQUIRED PRE-WORK

- What are the issues and challenges that Antamina faced during the different stages on the mining project?
- Who are the critical stakeholders of Antamina? What are their concerns?
- What is the level of commitment of the stakeholders in the mining operation? What is their level of influence?
- How did the company address the various issues and challenges? What measures did they put into place to address them?
- What are the strengths and weaknesses of their institutional partners that facilitated or hampered the company's efforts to successfully mine the site, as well as efforts to protect and promote the interest of the community?

Other Materials that could be Assigned as Required Reading or References

Herrera, M.B. and Decena, M.S. (2007). Measuring CSR Performance. In V. Santos (Ed.), *Doing Good in Business Matters: CSR in the Philippines: Volume 1 Frameworks* (pp. 196-231). Makati City: Asian Institute of Management and De La Salle Professional Schools.

Herrera, M.B., Alarilla, M.I. and Uy, R.L. (2011). *Towards Strategic CSR: Aligning CSR with the Business and Embedding CSR in the Organization: A Manual for Practitioners*. Makati City: Asian Institute of Management.

SUMMARY SESSION PLAN

The session will have six discussion blocks: 1) Developing a CSR Strategy 2) Stakeholder Identification, Analysis and Assessment; 3) Antamina's CSR Strategy and Initiatives; 4) Monitoring and Evaluating CSR Programs; 5) Mine Closure Program; and 6) Synthesis.

- **Developing a CSR Strategy** (10 minutes): The objective of this session block is to discuss the fundamentals in developing an effective CSR strategy.
- **Situation Analysis: Footprint and Stakeholders** (20 minutes): The objective of this session block is to identify the social and environmental footprint of Antamina's operations as well as the company's stakeholders, their level of commitment and the issues and concerns.
- **Antamina's CSR Strategy and Initiatives** (15 minutes): The objective of the session block is to discuss Antamina's CSR strategy and initiatives.
- **Monitoring and Evaluating CSR Programs** (15 minutes): The objective of this session block is to discuss the basics and value of monitoring and evaluating CSR programs and initiatives.
- **Mine Closure Program** (15 minutes): The objective of this session block is to discuss the necessity of a mine closure program, and Antamina's closure program for the mining project.
- **Synthesis** (5 mins)*:* The objective of the session block is to wrap up the discussion about the potential issues and concerns faced by mining companies in the pre-exploration, exploration and extraction stages. The participants could also provide suggestions on how Antamina could improve its community engagement strategies.

Board Plan

Board 1	Developing a CSR Strategy
Board 2	Stakeholder Analysis: Influence/Commitment
Board 3	Classification of Stakeholders: Level of Influence/ Level of Commitment
Board 4	Areas of Antamina's Sustainable Development (SD) Programs and Implementing Units/Bodies

ANALYSIS OF THE CASE[1]

The Compania Minera Antamina has made substantial contributions towards the development of the Ancash region since it embarked on the Antamina Mine project in 1996. In fact, in 2007, the company was recognized by managerial leaders from the University of Lima as the most socially responsible company in Peru.

[1]Unless otherwise indicated, all case facts were taken from the teaching case: Jilla Phoebe S. Decena, "Antamina and the Mining Fund," in Asian Institute of Management-Ramon V. del Rosario Sr. Center for Corporate Social Responsibility, *CSR in Mining for APEC Economies: Training Program Design Management Teaching Cases (Makati City,2011), TC4:1-13.*

Through various programs and vehicles that were set up, the company implemented numerous sustainable development initiatives for the community. Unfortunately, these efforts have seemingly engendered a culture of dependence (on the mining firm) in the beneficiary communities.

How could Antamina maximize its resources and implement its SD initiatives more efficiently and effectively? What should Antamina do to limit dependency of the community?

Background

Antamina mine is the largest copper zinc ore deposit in the world, and is located 4,300 meters above sea level in the Peruvian mountain ranges in the Ancash region specifically in the San Marcos district.

In 1996, the Compania Minera Antamina embarked on mining the site. An international joint venture, US$1.32 billion worth of loans from 22 international financial institutions were taken out to help finance the mining project.

The Antamina mining project, valued at US$2.54 billion, represented the most significant investment in the history of Peru. It had an estimated mine life of 25 years.

Preparations for the mine operation took three years to complete, which included leveling the tops of several mountains, draining a lagoon, and constructing roads. A total of 300 separate permits and authorizations also had to be obtained.

The company complied with government rules and regulations, such as conducting and submitting an Environmental Impact Assessment (EIA) to the government of Peru. Antamina also undertook several sustainable development programs to protect and promote the welfare of the community and the environment.

Like any other mining project, there were issues and challenges that arose that the company had to address. The company instituted measures to mitigate these.

In 2001, Antamina started its mining operations, and in three years, it was able to recoup its initial investment. The region benefited from the project's success. Apart from creating direct and indirect employment for 12,000 Peruvians, as well as the numerous programs that were implemented to improve the quality of the lives of the local community, under the Mining Canon Law, 50% of the income taxes from the mine were distributed to the regional and local government.

The Antamina Mining Fund (AMF) was also established. The AMF promotes regional development and gave priority to programs related to education, health, infrastructure, and income generating activities.

Unfortunately, according to the report of Apoyo Consultoria, even when the Ancash region received 969 million soles (about US$340 million) in 2008, only 42% of this was used due to the lack of institutional capacity of local governments to use the funds effectively.

In 2009, the company announced its intention to use the utilities reinvestment mechanism for its expansion program to increase production and extend the life of the mine to 2029. Although beneficial for the region in the long run, it would mean a short-term decrease in income for the region and the local government units. To ease the potential negative impact of this move, the company carried out direct and indirect compensation programs.

Developing a CSR Strategy

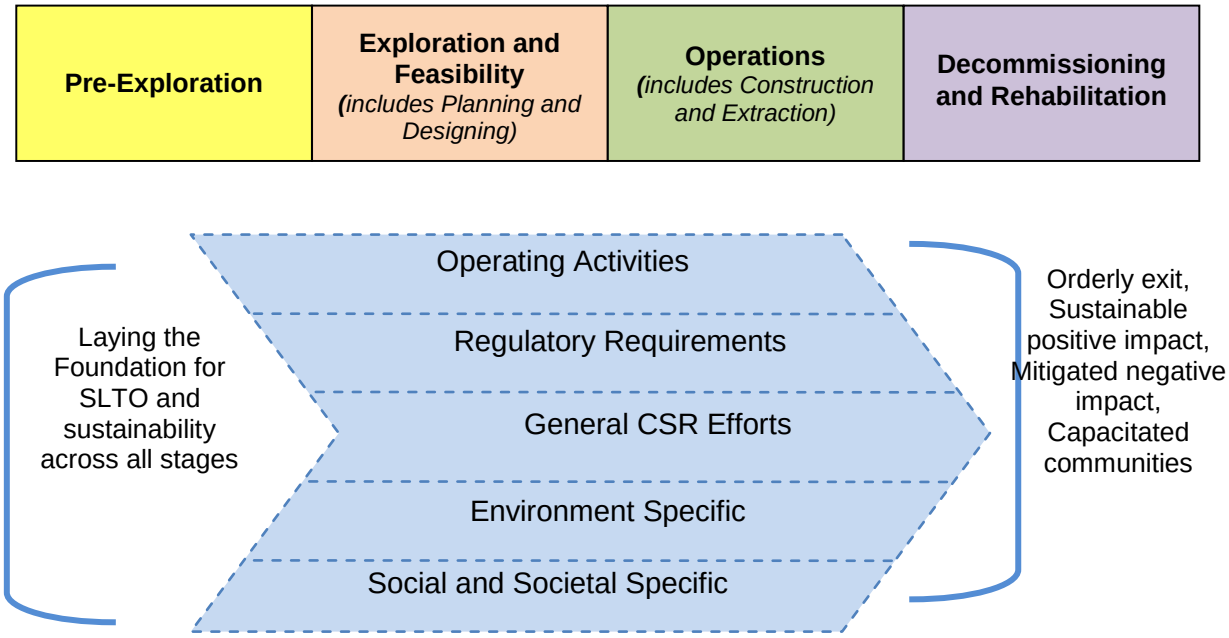
Though there are general principles and guidelines in crafting a CSR strategy, companies should develop theirs in a way that would best fit the environment in which they have to operate, and that would best serve their needs. Thus, in developing an effective CSR strategy, it is essential to first examine the internal and external forces that affect the company. Next in order is an examination of the interface between the company and its environment. In the case of mining companies, their operations follow a definite life cycle marked by several stages. Each stage involves key activities (Figure 1), analysis of which could help determine the potential environmental and social impacts, the company's mining footprint. The main objective of a CSR strategy in terms of the mining footprint is to minimize negative impact, and maximize positive impact.

The framework (Figure 2) illustrates the factors that need to be considered in developing a CSR strategy. Business context refers to the company's footprint (environmental and social impacts) and internal and external stakeholders and their issues and concerns. Corporate assets and capabilities are the company's resources and competencies. These two factors, as well as the company's mission and core values, must be taken into account when crafting a CSR strategy, with the end in view of creating social value.

In developing a CSR strategy for a mining project, it is important to plan for all the stages of the mine life cycle. Perhaps, quite unique to the mining industry is that their operations have a definite end. And this end signifies managing the "disturbances" that were caused by mining operations on the environment, as well as preparing the community to survive the eventual closure of the mine. Thus, it is critical for a mining company to plan ahead and include closure and rehabilitation programs in its CSR strategy.

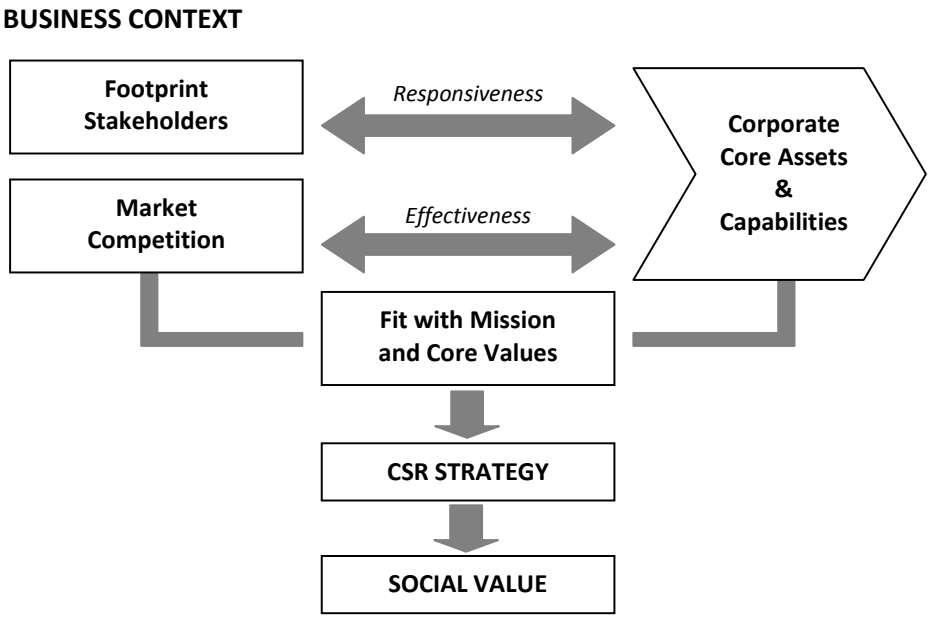
A company's CSR strategy should serve to guide its activities throughout all the stages in the mine life cycle. Recognizing however that since they will be operating within an especially dynamic system, characterized by varying stakeholders and concerns, and sometimes unanticipated challenges, a mining company should be prepared to make adjustments along the way. In addition, companies should be open to incorporate feedback that would aid them in enhancing their CSR programs. In the case of Antamina, the company made adjustments in their project design to integrate Peruvian, World Bank and Canadian environmental, health and safety standards and guidelines.

The Antamina Mining Project, which was launched in 1996, is currently in the extraction stage. Like any other mining venture, the company had to undertake the usual key activities involved in each stage. Their CSR strategy includes closure and rehabilitation programs, although there is still a need to make concrete plans for sustaining its programs for the community, as evidenced by the lack of a clear scheme on how AMF projects will be funded once the project shuts down.



Source: Maria Elena Baltazar Herrera (2012). Adapted from the Presentation " Framework for Strategic CSR in the Mining Sector" CSR in Mining in APEC Economies: Train the Trainers Program (4-8 June 2012), Legaspi City, Philippines

FIGURE 1: THE STAGES APPROACH TO SUSTAINABLE MINING



Source: RVR Center (2011). "Towards Strategic CSR: Aligning CSR with the Business and Embedding CSR into the Organization (A Manual for Practitioners)"

FIGURE 2: DEVELOPING A CSR STRATEGY FRAMEWORK

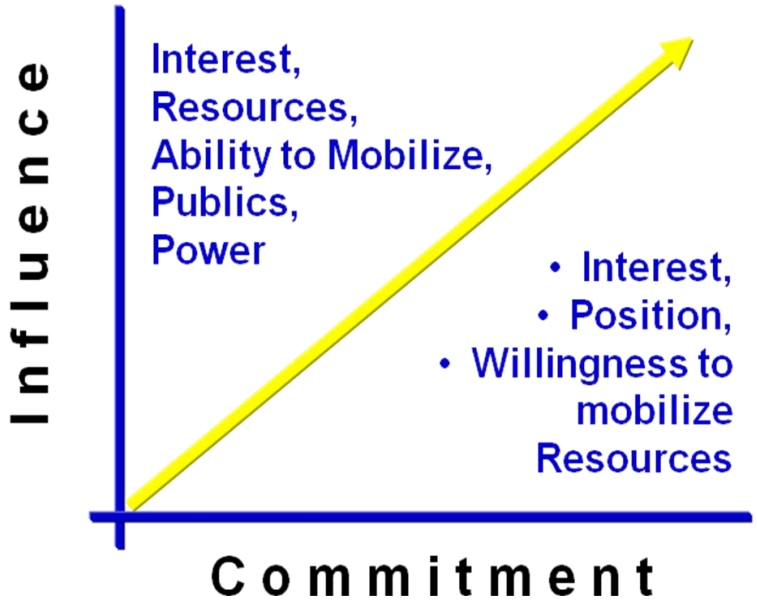
Stakeholders and their Issues and Concerns

Stakeholders and concerns vary across the different stages of the mine life cycle. The identification and analysis of stakeholders, and their issues and concerns, are crucial in

crafting an effective CSR strategy. Key to these is an assessment of the company's mining footprint, which is done through an examination of key activities in each stage (Figure 2) vis-à-vis the business landscape in which the company operates.

Stakeholder Analysis

A look into the key activities in each stage of the mine life cycle, and the environment the company has to operate in, will reveal the potential stakeholders of the project. An analysis of stakeholders and assessment of their issues and concerns should then be conducted, part of which is determining the levels of influence and commitment of stakeholders (Figure 3), which will allow a company to give priority to stakeholders and issues that could be critical to the project's successful implementation.



Source: Hererra, Maria Elena. CSR Collaboration. (January 2008). Presentation during the ASEAN Conference January 2008 as cited in Herrera, Maria Elena. "Strategic Cross-Sector Alliance for Sustainable Development."

FIGURE 3: STAKEHOLDER ANALYSIS: INFLUENCE AND COMMITMENT

In evaluating stakeholders' levels of influence and commitment, the following could be asked:[1]

- What are their objectives? What do they want to accomplish?
- What is their level of interest?
- What is their level of influence?
- What are their assets and competencies?
- What are their impacts on the company's operations and local community?
- What are their perceptions about the company and the company's operations?
- What would we like from them?
- How are we performing based on their interests?
- How do other companies deal with them at the local and industry level?

Key Players in the Antamina Project

[1] Herrera, Maria Elena. "Strategic Cross-Sector Alliance for Sustainable Development." PowerPoint presentation.

In the pre-exploration, exploration, and extraction stages, mining companies would have to deal with government and concerned agencies, local governments, and the community. A profile of identified key players in the Antamina Project is shown in Table 2.

TABLE 2. PROFILE OF KEY PLAYERS IN THE ANTAMINA PROJECT

What are their objectives? What do they want to accomplish?	Peruvian Government Regulate mining industry Economic gains from harnessing mineral resources Protect the welfare of the environment and the community Regional and Local Governments Economic gains from the project Protect the environment Apoyo Consulturia Monitor and evaluate programs/funds Community Social development programs Economic benefits from the mining project Remuneration for/provision of alternatives to the negative effects of the mining project on their lives (displacement, loss of livelihood etc) Huascaran National Park (HNP), Peruvian National Institute of Natural Resources (INRENA), The Mountain Institute (TMI), United Nations Educational, Scientific and Cultural Organization (UNESCO) Protect the Huascaran National Park

What is their level of interest?	<u>Peruvian Government</u> High Representing the most significant investment in Peruvian history, the project has contributed and is expected to continue contributing to the economic development of the economy <u>Regional and Local Governments</u> High Representing the most significant investment in Peruvian history, the project has contributed and is expected to continue contributing to the economic development of the region. Their people are directly affected by mining operations and will eventually be the ones to live with the aftermath of the project. <u>Apoyo Consulturia</u> High Tasked to monitor and evaluate Antamina's programs and funds <u>Community</u> High Representing the most significant investment in Peruvian history, the project has contributed and is expected to continue contributing to their social and economic development. They are directly affected by mining operations and will eventually be the ones to live with the aftermath of the project. <u>HNP, INRENA, TMI, UNESCO</u> High They opposed the use of existing roads (which crossed the park) for Antamina's mining operations

What is their level of influence?	<u>Peruvian Government</u> High Sets and regulates the fiscal and legal environment that mining companies have to operate in <u>Regional and Local Governments</u> High Issues permits and authorizations Could facilitate or impede operations <u>Apoyo Consulturia</u> -- (organization which only monitors and evaluates CSR programs) <u>Community</u> High Moderate* Social license to operate allows for better ease in the implementation of the project, although the community has no vetoing power*. *Note: In comparison, under the Philippine Law, when Indigenous Peoples are involved and will be directly affected by a mining project, Free and Prior Informed Consent (FPIC) should first be obtained from them before a mining company can push through with the project.* <u>HNP, INRENA, TMI, UNESCO</u> High Was able to force the company to build infrastructure as an alternative to existing roads crossing the park, which they didn't allow the mining company to use in its operations

What are their assets and competencies? What are their impacts on the company's operations and local community?	<u>Peruvian Government</u> Regulates mining industry, enacts mining laws, prescribes fiscal rewards and penalties <u>Regional and Local Governments</u> Authority over locality Issues permits and authorizations Could facilitate or impede operations <u>Apoyo Consulturia</u> Organization specializing in monitoring and evaluating development programs <u>Community</u> High Moderate* Social license to operate allows for better ease in the implementation of the project. The EIA was made public to allow the community to comment, but they have no vetoing power*. *Note: In comparison, under the Philippine Law, when Indigenous Peoples are involved and will be directly affected by a mining project, Free and Prior Informed Consent (FPIC) should first be obtained from them before a mining company can push through with the project.* <u>HNP, INRENA, TMI, UNESCO</u> Held enough influence to disallow Antamina from using existing roads that crossed the HNP
What are their perceptions about the company and the company's operations?	<u>Peruvian Government</u> As an implementing/ regulating body: Presumed to be NEUTRAL <u>Regional and Local Governments</u> POSITIVE: In terms of the economic and social benefits that their localities will gain from the project NEGATIVE: In terms of the mining company's intention to utilize the utilities reinvestment mechanism which will result in income tax losses on their part. They deem it as unnecessary since the company was even able to recoup its investments in only 3 years. <u>Apoyo Consulturia</u> As monitoring and evaluating body: Should be NEUTRAL <u>Community</u> POSITIVE: Their increasing dependence on the company could be construed as an indication that they perceive the company as dependable and capable of taking care of the community's needs <u>HNP, INRENA, TMI, UNESCO</u> On the mining project itself, presumed to be neutral as no information was given in the teaching case to support otherwise. They only opposed the company's use of existing roads crossing the HNP.

What does the company want from them?	Peruvian Government Fiscal incentives Regional and Local Governments Permits and authorizations Support and partnership in implementing sustainable development programs Apoyo Consulturia Assumption: Useful data from monitoring and evaluation activities that would help enhance the company's CSR programs Community Social license to operate HNP Initially, to be allowed to utilize existing roads crossing the HNP
How are we performing based on their interests?	Peruvian Government Satisfactory: The project has made substantial contributions to the economy Regional and Local Governments Satisfactory: The project has made substantial contributions to their economy Apoyo Consulturia No negative feedback indicated in teaching case. Criticized only the local governments' lack of capacity to utilize company's contributions Community Satisfactory: The project has made substantial contributions to their social and economic development HNP, INRENA, TMI, UNESCO --
How do other companies deal with them at the local and industry level?	Peruvian Government None indicated in teaching case Regional and Local Governments Presumed to be not as good as Antamina does, since the company had to deal with legacy issues left by previous mining companies Apoyo Consulturia -- Community Presumed to be not as good as Antamina does, since the company had to deal with legacy issues left by previous mining companies HNP, INRENA, TMI, UNESCO None indicated in teaching case

Antamina's CSR Strategy and Initiatives

Antamina is committed to be a "Strategic partner to the communities (to) achieve their own development and improve their quality of life."[1] Considered as one of the most socially responsible companies in Peru, Antamina seeks to:

> …combine our business objectives with the aspirations and hopes of the communities near our operations. That is why we implement consultation and constant communication for community relations as indispensable tools. We seek to improve the lives of our neighbors, both in health and education, and infrastructure and economic development, but acting responsibly, working on a joint and looking for more active participation of the State, NGOs and above all, of the Community.[2]

And in keeping with its commitment to sustainable development, Antamina undertook numerous SD activities (Table 3).

TABLE 3. SUSTAINABLE DEVELOPMENT ACTIVITIES OF ANTAMINA

PROGRAM/ RESPONSIBLE BODY	Activities
Community Relations Office[3]	Education Programs: • Information technology training for 300 teachers • Improvement of computer skills of 1500 students • Improvement in the quality of education • Training in hotel management; 200 young people • Scholarships for undergraduate studies
	Health Programs: • Joint work with Regional Health Authority • Programs to prevent alcoholism in young people and family violence • Agreement with NGO VIDA to provide equipment for the Local Committees on Health Management
	Productive Programs: • Experimental Center for the development of cattle (Shahuanga) • Program "Potato seed" • Programs to improve agricultural management • Programs to improve the rearing of alpacas in Yanacancha
Antamina Mining Fund	2008 Project Commitments: • US$28m for health and nutrition • US$28m for education • US$50m for institutional capacity building and basic infrastructure • US$14m for productive development • US$0.7m for peace reparations
	2009 US$159 million: • 43% institutional strengthening • 24% health • 14% education • 14% productive development

[1] Antamina, "Social Responsibility," http://www.antamina.com/temp/resp_social.html.
[2] Ibid
[3] From "Antamina" as cited in Jilla Phoebe S. Decena, *Antamina and the Mining Fund*.

	Specific examples of AMF initiatives: • construction of recreational centers for children under three years old • distribution of desks and libraries • expanded the market for small and medium sized businesses by incorporating them into export supply chains • Alli Allpa project - development of eight productive chains for the following cash crops: artichokes, corn, peas, tarwi, oats, dairy products, tara and fruits • Trained local government officials to improve their management skills in order for them to be able to utilize resources from AMF and Mining Canon more efficiently • Program to improve production of artisan fishermen (from subsistence to commercial fishing) • Comprehensive system to ensure environmental compliance, including programming, sampling, testing, analyzing, reporting and presenting results to the regulatory authority • Broad air, water and soil evaluation system regularly audited by supervising authorities
	AMF Activities by Area[1] Health and Nutrition: • Capacity building for 196 doctors, 157 nurses, 159 obstetricians, 651 technical personnel and 47 biologists • US$1 million in proteins given to children of school age • Education of 120 districts regarding food practices as well as health care • Installation of water systems, drains and ecological toilet for 656 families Education: • 300 schools improved their communication skills • 65 schools received tachers' training • 35,752 desks were distributed • 77 schools received maintenance assistance • 10 recreational centers were constructed in Huarmey Productive Development • US$18 million in sales was generated by facilitating coordination between the producers and the market • 72 projects approved and financed for US$10 million • Organization of two business days obtaining sales of US$6.6 million Institutional Strengthening: • Implemented 57 projects
Association Ancash	• Conservation of environment • Sustainable tourism • Improvement of local culture

[1]From www.fondomineroantamina.com as cited in Jilla Phoebe S. Decena, *Antamina and the Mining Fund.*

Monitoring and Evaluation of CSR Programs

CSR programs are designed to achieve certain objectives and outcomes. It is thus imperative to conduct monitoring and evaluation (M&E) of these programs to check if they are yielding the desired results.

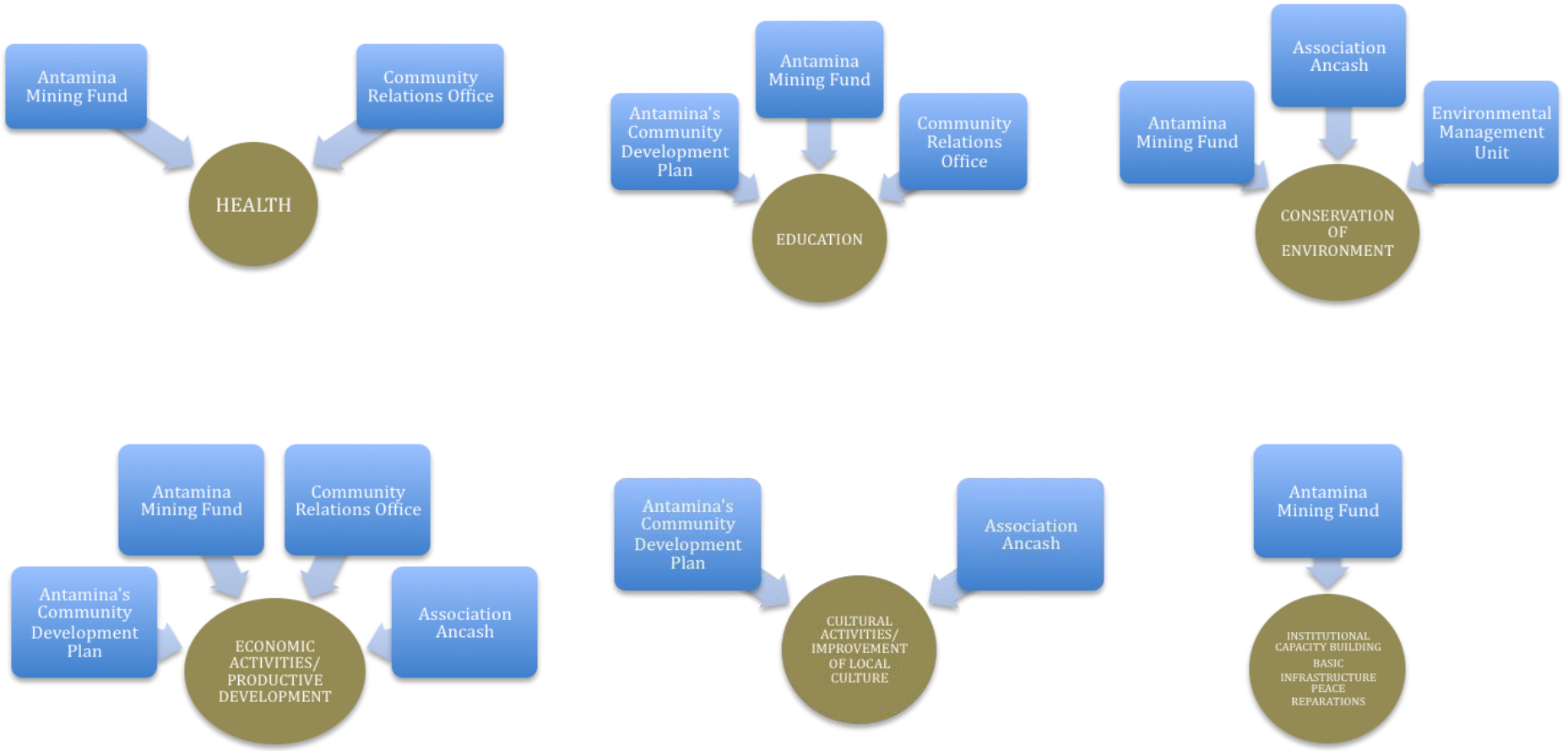
According to the United Nations Development Program:[1]

> Monitoring, as well as evaluation, provides opportunities at regular pre-determined points to validate the logic of a program, its activities and their implementation and to make adjustments as needed. Good planning and designs alone do not ensure results. Progress towards achieving results needs to be monitored. Equally, no amount of good monitoring alone will correct poor program designs, plans and results. Information from monitoring needs to be used to encourage improvements or reinforce plans. Information from systematic monitoring also provides critical input to evaluation. It is very difficult to evaluate a program that is not well designed and that does not systematically monitor its progress.
>
> Like monitoring, evaluation is an integral part of program management and a critical management tool. Evaluation complements monitoring by providing an independent and in-depth assessment of what worked and what did not work, and why this was the case…A quality evaluation provides feedback that can be used to improve programming, policy and strategy. Evaluation also identifies unintended results and consequences of development initiatives, which may not be obvious in regular monitoring as the latter focuses on the implementation of the development plan.

Antamina has made substantial endowments for sustainable development programs in the region. Apart from these, the Ancash department and local government units in the region also receive royalties through the Mining Canon, which prescribes that these be used for SD programs too. With all these available funds: 1) it was discovered that 58% of the funds that were allotted in 2008 were not fully used due to lack of capacity of local government partners to come up with projects and implement them; 2) some members of the community have become too dependent on the company; 3) there are some communities in the region who are not benefiting from the success of the project and its SD programs; and 4) several groups are implementing parallel programs. Having several groups implementing various programs in the same focus areas (Figure 4) may be seen as positive, but it could also be counterproductive as it leaves room for redundancies and overlaps. It is thus imperative that monitoring and evaluation of all programs be conducted to maximize the available resources and allow economic benefits from the project to trickle down to and be felt by all affected communities, especially the poorest ones.

[1]UNDP."Handbook on Planning, Monitoring and Evaluating for Development Results," 2009, http://web.undp.org/evaluation/handbook/ch1-2.html.

Figure 4. Areas of Antamina's SD Programs and Implementing Units/Bodies



Mine Closure Program

The 1990s saw several countries in Latin America, namely Argentina, Bolivia, Chile and Peru, establishing legal regimes that would give them a competitive edge in attracting investments in the mining industry. In the course of enacting legal frameworks to support the advancement of the mining industry, the right to the environment, access to information, and public participation rights were also strengthened.[1]

Bastida and Sandford note that increased emphasis in environmental protection were brought about by:

- Trends and developments in international law – and the ratification of core international environmental instruments by Argentina, Bolivia, Chile and Peru;
- Increasing concerns for the negative impacts of mining raised by booming activity;
- The privatization of State Mining Enterprises;
- Practices (and requirements) brought by international organizations involved in legal reform; and,
- The continuing objective of providing clear, stable and predictable rules of the game for private investment.

Like other countries with a strong history of mining, several countries in Latin America are confronted with evident environmental legacies left by previous mining activities. This has stressed the value of good practices in mine closure and has reinforced the need for stronger policies on this particular aspect of mining operations.

The countries mentioned above have been recognized for their working towards instituting higher standards and good practices in relation to mine closure, with "Peru providing a leading example towards the integration of a more comprehensive mine closure regime-."[2] Among the most relevant laws in Peru that provide rules and regulations on mining operations are:[3]

- 1991 Law for the Promotion of Investment in the Mining Sector
- Single Revised Text of the General Law of Mining
- 2003 Law Regulating the Closure of Mines (first law that included financial provisions for mine closure)

In terms of mine closure, under Peruvian mining laws, companies are required to:

- Include closure plans in Peru's version of the EIA, the Environmental Adjustment and Management Programme (or PAMA in Spanish); and
- Establish an environmental guarantee equivalent to the estimated cost of the mine closure plan.

The Compañía Minera Antamina has formulated a comprehensive mine closure program (Exhibit 1).[4] And true to its form of being the leading company in best practices, Antamina had already set up an environmental bond even before the enactment of the 2003 Law Regulating the Closure of Mines.[5]

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[1] Elizabeth Bastida and Tony Sanford. "Mine Closure in Latin America: A Review of Recent Developments in Argentina, Bolivia, Chile and Peru," 2010, <http://www.sdsg.org/wp-content/uploads/2010/02/Mine-closure-Latin-America-Bastida-and-Sanford-for-SEMINA.pdf>

[2] Bastida and Sanford.

[3] Ibid.

[4] The teaching case only mentioned that the company had a closure program. No details were given.

[5] Ibid.

SESSION PLAN DETAILS AND KEY MESSAGES

Developing a CSR Strategy Session Block (10 minutes)

Key Messages:

- *There is no "one size fits all" CSR strategy.*
- *A CSR strategy cannot be created in a vacuum. It is essential to examine the internal and external forces that the company has to operate in/with.*
- *In developing a CSR strategy for a mining project, it is important to plan for all the stages of the mine life cycle.*
- Background on the Antamina Project
- This could include the following:
    1. Antamina mine is the largest copper zinc ore deposit in the world, and is located 4,300 meters above sea level in the Peruvian mountain ranges in the Ancash region specifically in the San Marcos district.
    2. In 1996, the Compania Minera Antamina embarked on mining the said site.
    3. An international joint venture, US$1.32 billion worth of loans from 22 international financial institutions were taken out to help finance the mining project.
    4. The Antamina mining project, valued at US$2.54 billion, represented the most significant investment in the history of Peru. It had an estimated mine life of 25 years.
    5. Preparations for the mine operation took three years to complete, which included leveling the tops of several mountains, draining a lagoon, and constructing roads, among others. A total of 300 separate permits and authorizations also had to be obtained for the project.
    6. The company complied with government rules and regulations, such as conducting and submitting an Environmental Impact Assessment (EIA) to the government of Peru. Apart from these compliances, Antamina also undertook several sustainable development programs to protect and promote the welfare of the community and the environment.
    7. In 2001, Antamina started its mining operations, and in three years, it was able to recoup its initial investment.
    8. The region benefited from the project's success. Apart from creating direct and indirect employment for 12,000 Peruvians, as well as the numerous programs that were implemented to improve the quality of the lives of the local community, under the Mining Canon Law, 50% of the income taxes from the mine were distributed to the regional and local government.
    9. The Antamina Mining Fund (AMF) was also established. The AMF promotes regional development and prioritized programs related to education, health, infrastructure, and income generating activities.
    10. In 2009, the company announced its intention to use the utilities reinvestment mechanism for its expansion program to increase production and extend the life of the mine to 2029. Although beneficial for the region in the long run, it would mean a short-term decrease in income for the region and the local government units. To ease the potential negative impact of this move, the company carried out direct and indirect compensation programs.
- Fundamentals in Crafting a CSR Strategy

Using Board 1, discuss the CSR framework.

There is no "one size fits all" CSR strategy. Thus, in developing an effective CSR strategy, it is essential to first examine the internal and external forces that affect a company. Next in order is an examination of the interface between the company and its environment. In the case of mining companies, their operations follow a definite life cycle marked by several

stages. Each of the stage involves key activities (Figure 1), analysis of which could help determine the potential environmental and social impacts, the company's mining footprint. The main objective of a CSR strategy in terms of the mining footprint is to minimize negative impact, and maximize positive impact.

The framework illustrates the factors that need to be considered in developing a CSR strategy. Business context refers to the company's footprint (environmental and social impacts) and internal and external stakeholders and their issues and concerns. Corporate assets and capabilities are the company's resources and competencies. These two factors, as well as the company's mission and core values, must be taken into account when crafting a CSR strategy, with the end in view of creating social value.

In developing a CSR strategy for a mining project, it is important to plan for all the stages of the mine life cycle. Perhaps, quite unique to the mining industry is that their operations have a definite end. And this end signifies managing the "disturbances" that were caused by mining operations on the environment, as well as preparing the community to survive the eventual closure of the mine. Thus, it is critical for a mining company to plan ahead, including closure and rehabilitation programs in its crafting of a CSR strategy.

Situation Analysis: Footprint and Stakeholder Session Block (20 minutes)

Key Message/s:

- *It is important to identify the company's economic, social and environmental impact in analyzing stakeholder concerns*
- *Stakeholders and concerns vary across the different stages of the mine life cycle.*
- *The identification and analysis of stakeholders, and their issues and concerns, are crucial in crafting an effective CSR strategy.*
- *Stakeholders will often have disparate needs and wants, thus it is important to identify and prioritize those that are critical to the successful implementation of the mining project.*

- Summary of the Company's Footprint

  <u>Economic</u>
  - Taxes paid to the local and national government
  - Positive impact on GDP
  - Employment opportunities
  - Antamina is one of if not the largest investment in Peruvian history
  - Impact on other industries through the procurement of goods and services
  - Creation of new businesses as a result of the company's programs

  <u>Environmental</u>
  - Change in terrain- In creating the mine the top of several mountains had to be removed and a lagoon drained.
  - Potential environmental degradation due to operations (i.e. contamination of water).

  <u>Social</u>
  - Potential dependence of the communities on the company
  - Social development programs that have resulted in improvements in various areas such as education
  - Promotion of local culture through Association Ancash
  - Improvement of local infrastructure (i.e. access road the connects communities and laying of optic cables for telecommunication services)

Lead Question: Who are the key players in the Antamina Project? What are their issues and concerns?

- Summary of Principal Stakeholders and the Issues and Concerns

  Peruvian Government
  Regulate mining industry
  Economic gains from harnessing mineral resources
  Protect the welfare of the environment and the community

  Regional and Local Governments
  Economic gains from the project
  Protect the environment

  Apoyo Consulturia
  Monitor and evaluate programs/funds

  Community
  Social development programs
  Economic benefits from the mining project
  Remuneration for/provision of alternatives to the negative effects of the mining project on their lives (displacement, loss of livelihood etc)
  Protect the Huascaran National Park
  - Huascaran National Park (HNP), Peruvian National Institute of Natural Resources (INRENA), The Mountain Institute (TMI), United Nations Educational, Scientific and Cultural Organization (UNESCO)

Question: What are the key players' levels of influence? Their levels of commitment?

Using Board 2, discuss in brief stakeholder analysis in terms of level of influence and level of commitment.

Ask the students/participants to evaluate identified key players' levels of influence and commitment.

Use Board 3 to map them out. The following questions could be used to run the discussion:[1]

- What are their objectives? What do they want to accomplish?
- What is their level of interest?
- What is their level of influence?
- What are their assets and competencies?
- What are their impacts on the company's operations and local community?
- What are their perceptions about the company and the company's operations?
- What would we like from them?
- How are we performing based on their interests?
- How do other companies deal with them at the local and industry level?

Note: Please refer to Table 2 (Profile of Key Players in the Antamina Project) for possible answers to the above questions.

At the end of the discussion on key players' profiles based on the above questions, ask the students/participants to classify key players in terms of their level of influence and level of commitment. Use Board 3 to map them out.

Who are the critical stakeholders? Which among the issues and concerns should be given priority? How should the company address these?

Antamina's CSR Strategy and Initiatives Session Block (15 minutes)

Key Messages:

- *Mining companies' daily operations/SD initiatives are best guided by an SD Policy.*
- *As stakeholders' needs and wants vary, it is important to prioritize addressing those that are critical to the successful implementation of the mining project.*
- Antamina's SD Policy
  Antamina is committed to be a "Strategic partner to the communities (to) achieve their own development and improve their quality of life."[1] Considered as one of the most socially responsible companies in Peru, Antamina seeks to:

…combine our business objectives with the aspirations and hopes of the communities near our operations. That is why we implement consultation and constant communication for community relations as indispensable tools. We seek to improve the lives of our neighbors, both in health and education, and infrastructure and economic development, but acting responsibly, working on a joint and looking for more active participation of the State, NGOs and above all, of the Community.[2]

- Antamina's Initiatives to Address Stakeholder Concerns

How did the company address the various issues and challenges? What measures did they put into place to address them?

Table 3 shows the possible answers as discussed in the teaching case.
Table 3. Sustainable Development Activities of Antamina

PROGRAM/ RESPONSIBLE BODY	Activities
Community Relations Office[3]	Education Programs: • Information technology training for 300 teachers • Improvement of computer skills of 1500 students • Improvement in the quality of education • Training in hotel management; 200 young people • Scholarships for undergraduate studies
	Health Programs: • Joint work with Regional Health Authority • Programs to prevent alcoholism in young people and family violence • Agreement with NGO VIDA to provide equipment for the Local Committees on Health Management
	Productive Programs: • Experimental Center for the development of cattle (Shahuanga) • Program "Potato seed"

[1]Antamina, "Social Responsibility," http://www.antamina.com/temp/resp_social.html.
[2]Ibid
[3]From "Antamina" as cited in Jilla Phoebe S. Decena, *Antamina and the Mining Fund*.

	• Programs to improve agricultural management • Programs to improve the rearing of alpacas in Yanacancha
Antamina Mining Fund	2008 Project Commitments: • US$28m for health and nutrition • US$28m for education • US$50m for institutional capacity building and basic infrastructure • US$14m for productive development • US$0.7m for peace reparations
	2009 US$159 million: 10 43% institutional strengthening 11 24% health 12 14% education 13 14% productive development
	Specific examples of AMF initiatives: • construction of recreational centers for children under three years old • distribution of desks and libraries • expanded the market for small and medium sized businesses by incorporating them into export supply chains • Alli Allpa project - development of eight productive chains for the following cash crops: artichokes, corn, peas, tarwi, oats, dairy products, tara and fruits • Trained local government officials to improve their management skills in order for them to be able to utilize resources from AMF and Mining Canon more efficiently • Program to improve production of artisan fishermen (from subsistence to commercial fishing) • Comprehensive system to ensure environmental compliance, including programming, sampling, testing, analyzing, reporting and presenting results to the regulatory authority • Broad air, water and soil evaluation system regularly audited by supervising authorities
	AMF Activities by Area[1] Health and Nutrition: • Capacity building for 196 doctors, 157 nurses, 159 obstetricians, 651 technical personnel and 47 biologists • US$1 million in proteins given to children of school age • Education of 120 districts regarding food practices as well as health care • Installation of water systems, drains and ecological toilet for 656 families Education: • 300 schools improved their communication skills • 65 schools received tachers' training

[1]From www.fondomineroantamina.com as cited in Jilla Phoebe S. Decena, *Antamina and the Mining Fund.*

	• 35,752 desks were distributed • 77 schools received maintenance assistance • 10 recreational centers were constructed in Huarmey Productive Development • US$18 million in sales was generated by facilitating coordination between the producers and the market • 72 projects approved and financed for US$10 million • Organization of two business days obtaining sales of US$6.6 million Institutional Strengthening: • Implemented 57 projects
Association Ancash	• Conservation of environment • Sustainable tourism • Improvement of local culture

Looking at Antamina's SD initiatives, can you say that the company fulfilled its SD policies? Are they deserving of the recognition as the most socially responsible mining company in Peru? How would you rate Antamina's CSR strategy/SD initiatives?

Using Board 4 (Areas of Antamina's SD Programs and Implementing Units/Bodies):
What are the possible scenarios/problems that may result from these function overlaps/redundancies?
Should the company do something about it? If yes, ask the students to come up with possible measures to either: 1) make this situation work for the company or 2) amend the situation.

Monitoring and Evaluating CSR Programs Session Block (15 minutes)

Key Messages:

- *Monitoring and evaluation of all programs is necessary to maximize available resources*
- *Monitoring and evaluation identifies what worked and did not work, allowing adjustments to be made in the program*
- *Evaluation also identifies unintended results and consequences of SD programs*
- Importance of Monitoring and Evaluation

What is the value of monitoring and evaluation?

CSR programs are designed to achieve certain objectives and outcomes. It is thus imperative to conduct monitoring and evaluation (M&E) of these programs to check if they are yielding the desired results.
According to UNDP:[1]

- Monitoring, as well as evaluation, provides opportunities at regular pre-determined points to validate the logic of a program, its activities and their implementation and to make adjustments as needed.
- Good planning and designs alone do not ensure results. Progress towards achieving results needs to be monitored. Equally, no amount of good monitoring alone will correct poor program- designs, plans and results. Information from monitoring needs to be used to encourage improvements or reinforce plans.

[1]UNDP. "Handbook on Planning, Monitoring and Evaluating for Development Results," 2009, http://web.undp.org/evaluation/handbook/ch1-2.html.

- Information from systematic monitoring also provides critical input to evaluation. It is very difficult to evaluate a program that is not well designed and that does not systematically monitor its progress.
- Like monitoring, evaluation is an integral part of program management and a critical management tool.
- Evaluation complements monitoring by providing an independent and in-depth assessment of what worked and what did not work, and why this was the case…A quality evaluation provides feedback that can be used to improve programming, policy and strategy.
- Evaluation also identifies unintended results and consequences of development initiatives, which may not be obvious in regular monitoring as the latter focuses on the implementation of the development plan.
- Issues Antamina could have Addressed through Monitoring and Evaluation

Looking at the case of Antamina, what issues and challenges are they faced with that may be addressed through proper monitoring and evaluation?

Antamina has made substantial endowments for sustainable development programs in the region. Apart from these, the Ancash department and local government units in the region also receive royalties through the Mining Canon, which prescribes that these be used for SD programs too. With all these available funds:

- It was discovered that 58% of the funds that were allotted in 2008 were not fully utilized due to lack of capacity of local government partners to come up with projects and implement them;
- Some members of the community have become too dependent on the company;
- There are some communities in the region who are not benefiting from the success of the project and its SD programs; and
- Several groups are implementing parallel programs. Having several groups implementing various programs in the same focus areas (Figure 4) may be seen as positive , but it could also be counterproductive as there is room for redundancies and overlaps.

It is thus imperative that monitoring and evaluation of all programs be conducted in order to maximize the available resources and allow economic benefits from the project to trickle down to and be felt by all affected communities, especially the poorest ones.

Mine Closure Program Session Block (15 minutes)

Key Messages:

- *Mine closure has been recognized as an integral part of any mining program and should be included in the plans during project inception*
- Environmental Trends that have Led to the Focus on Environmental Protection

What are the recent trends that brought about the increased emphasis on environmental protection in the mining industry? On the importance of mine closure programs?

1. Environmental legacies left by past mining activities;
2. Trends and developments in international law;
3. Increasing concerns for the negative impacts of mining raised by booming activity; and,
4. Practices (and requirements) brought by international organizations involved in legal reform.

- Peru's Regulations on Mine Closure

Like other countries with a strong history of mining, several countries in Latin America are confronted with evident environmental legacies left by previous mining activities. This has stressed the value of good practices in mine closure and has reinforced the need for stronger policies on this particular aspect of mining operations.
Peru has provided a leading example towards the integration of a more comprehensive mine closure regime-."[1]

Among the laws in Peru that provide rules and regulations on mining operations in Peru are:[2]

- 1991 Law for the Promotion of Investment in the Mining Sector
- Single Revised Text of the General Law of Mining
- 2003 Law Regulating the Closure of Mines (first law that included financial provisions for mine closure)

In terms of mine closure, under Peruvian mining laws, companies are required to:

- Include closure plans in Peru's version of the EIA, the Environmental Adjustment and Management Programme (or PAMA in Spanish); and
- Establish an environmental guarantee equivalent to the estimated cost of the mine closure plan.

Discuss Compañía Minera Antamina's mine closure program (Exhibit 1).

How would you rate the company's closure program? Is it in keeping with the company's commitment to responsible mining?

Synthesis Session Block (5 minutes)

Wrap up the discussion about the potential issues and concerns faced by mining companies in the pre-exploration and exploration stages.

The participants could also provide suggestions on how SMI could improve its community engagement strategies.

KEY CLOSING MESSAGES

- A CSR strategy cannot be created in a vacuum. It is essential to examine the internal and external forces with which the company must operate.
- In developing a CSR strategy for a mining project, it is important to plan for all the stages of the mine life cycle.
- Stakeholders and concerns vary across the different stages of the mine life cycle. The identification and analysis of stakeholders, and their issues and concerns, are crucial in crafting an effective CSR strategy.
- Mining companies' daily operations/SD initiatives are best guided by an SD Policy.
- Monitoring and evaluation of all programs is necessary to maximize available resources, allowing adjustments to be made in the program
- Acceptability of key metrics is an important criteria for CSR programs. Metrics need to be relevant and acceptable to key stakeholders.
- Mine closure should be included in the design of the mining program.

1 Bastida and Sanford.
2 Ibid.

EXHIBIT 1 ANTAMINA'S MINE CLOSURE PROGRAM[1]

General Closure Objectives	Accomplishment of Peruvian regulations Accomplishment of additional EIA commitments Accomplishment of additional commitments with communities and other third parties As far as possible, the design of the closure plan will offer a "passive" closure condition and will minimize the care and maintenance requirements
Closure Standards	Open Pit The pit will not be filled out at closure. Waste Rock Dump Rock dump overall slope should be stable in the long term. Tailings Dam Verify that the slope stability of the dam is sufficient to withstand the maximum credible earthquake. Geochemical Stabilization The objectives of water quality for site effluents are the maximum permissible levels of mining effluent discharge, set out in the effective legislation. Revegetation Carried out according to defined land use at closure. Aquatic Habitat Rehabilitation Maintain the quality of surface water bodies located near the project area. Social Programs Includes the development of optimal social programs in order to mitigate and/or prevent potential negative social impacts related to project closure. Community participation in the implementation of land use at closure is important to ensure sustainability of the ecological environment.
Standards for Post-closure Stage	Implement monitoring programs for surface water and groundwater Passive maintenance of reshaping works after the first rainy season Surveillance of the study area during monitoring and maintenance Social monitoring of the surrounding communities and the radius of influence of the study area. Evaluation of environmental quality results in soil and water components after the first year of remediation of environmental legacies.
Research	Waste Rock Research In collaboration with The University of British Columbia and Teck. Geochemical and hydrological behavior of waste rock. Antamina has implemented a research with field experimental wasterock piles and field cells under site conditions. Input to improve the waste management during the operational activities. Cover Study Research To identify the most efficient cover to reduce the oxygen diffusion and water infiltration.

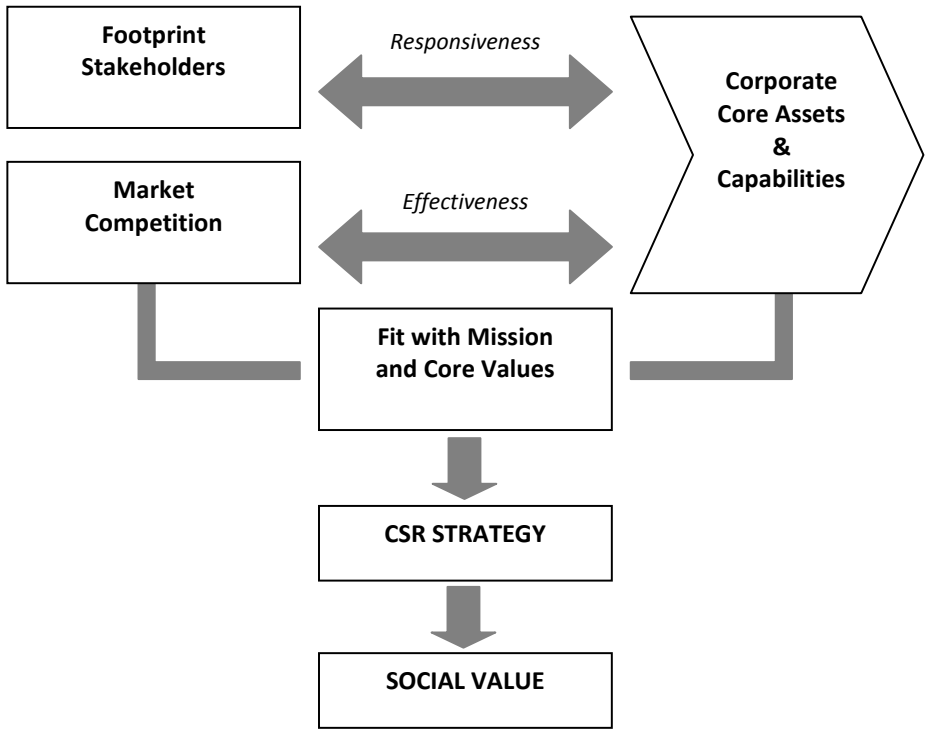
[1] Antonio M. Mendoza, "Antamina Closure Plan. A Top Level Practice," 2010, http://www.mineclosure2010.com/evento2010/images/stories/gallery/authors/pdf/Session%2010/01%20Antonio_Mendoza.pdf

	<u>Test Plots Study</u> To identify the best option for revegetation using the less (tick of) top soil to be used during closure

Measures to prevent failures in the closure plan	To identify the components of greatest impact on the closure plan: • Tailings dam Physical impact / Chemical impact • Waste Dumps Physical impact / Chemical impact • Open pit Physical impact / Chemical impact Develop studies and activities required to manage the physical impact likely to be built and maintained in the long term. Develop self-research to control the chemical impact of the closure plan. Confirm the sustainability of activities in the long term.
Financial Guarantees	Cierre Progresivo (closure) $74,549,205 Cierre Final (final closure) $63,812,018 Post-cierre (post-closure) $26,917,585 Presupuesto total del plan cierre $165,278,808 (Total budget of the closure plan)

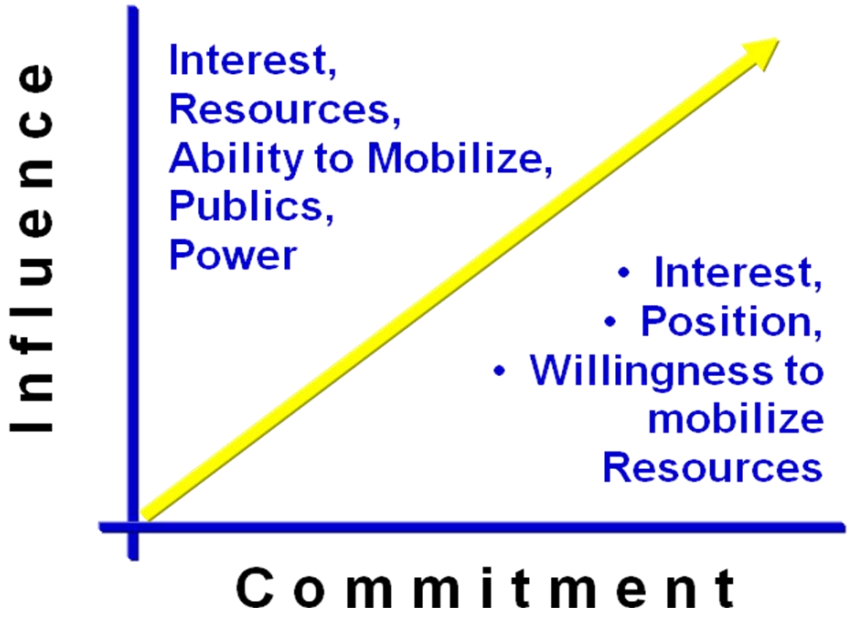
BOARD 1 DEVELOPING A CSR STRATEGY FRAMEWORK

BUSINESS CONTEXT



Source: RVR Center (2011). "Towards Strategic CSR: Aligning CSR with the Business and Embedding CSR into the Organization (A Manual for Practitioners)"

BOARD 2 STAKEHOLDER ANALYSIS: INFLUENCE/COMMITMENT

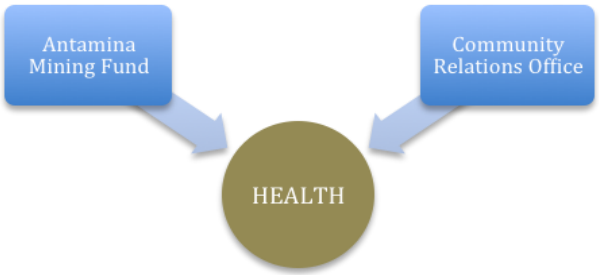


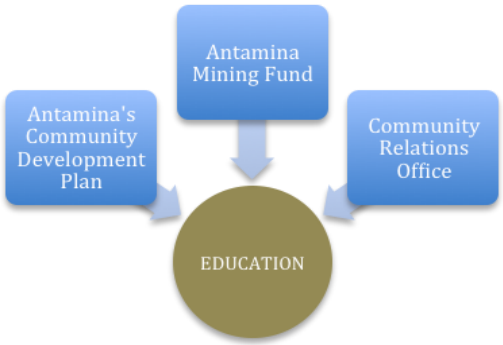
Source: Herrera, Maria. CSR Collaboration. (January 2008). Presentation during the Asean Conference. January 2008 as cited in Herrera, Maria Elena. "Strategic Cross-Sector Alliance for Sustainable Development."

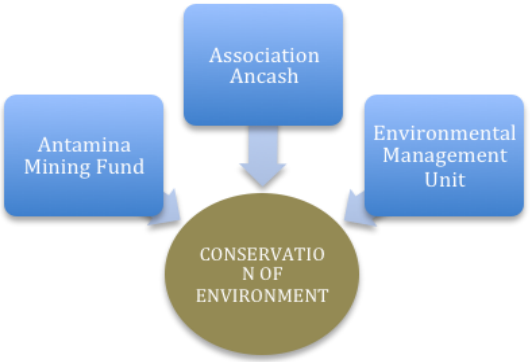
BOARD 3 CLASSIFICATION OF STAKEHOLDERS: LEVEL OF INFLUENCE/ LEVEL OF COMMITMENT

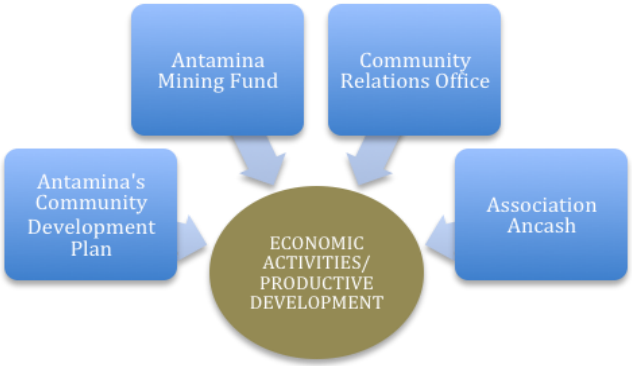
High Level of Influence High Level of Commitment	High Level of Influence Low Level of Commitment
Low Level of Influence High Level of Commitment	Low level of Influence Low Level of Commitment

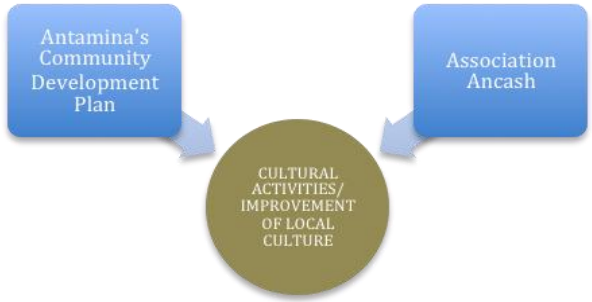
Board 4 **Areas of Antamina's SD Programs and Implementing Units/Bodies**

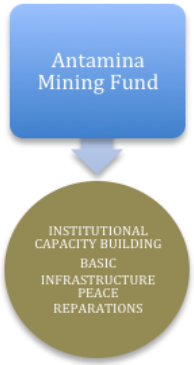












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PHILEX MINING CORPORATION: MULTI-SITE IMPLEMENTATION OF CSR TEACHING NOTE

ABSTRACT

A company's undertakings and responsibilities change across the different stages of mining because the needs of the community change as well. The case examines Philex's multi-site implementation of its CSR programs, and shows that while a CSR framework is necessary, it must be flexible enough to respond to the specific needs of a company's stakeholders. Stakeholder concerns are affected not just by the different stages of mining, but also by historical, cultural, and economic factors unique to each community.

Key words: Corporate Social Responsibility, Mining

Economy: Philippines

PRIMARY TOPIC AND USE

The case and this teaching note were created for the APEC Human Resources Development Working Group Capacity building network, and are meant to be used in the course discussing CSR in the APEC mining sector. This course is primarily for mining professionals, and people who work in NGOs and government agencies that deal with the mining industry. Course participants are all expected to have a working background in and basic knowledge of the mining industry.

KEY LEARNING OBJECTIVES

At the end of the case discussion, participants should be able to:

- Identify the different issues and concerns faced by mining companies and their stakeholders across the different mining stages.
- Understand that although a company's CSR principles and policies may serve as a guide, implementation will be different across different sites and across the different stages of mining.
- Understand that effective CSR, particularly in mining, must address the specific needs of the community in which the firm operates.
- Understand the importance of continual dialogue and partnership with the community and local government units in ensuring responsible and thus sustainable operations.

ASSIGNED STUDY QUESTIONS/ REQUIRED PRE-WORK

Guide questions and recommended discussion time (80-minute class):

- *How did Philex implement their CSR programs across the different mine sites?*
- *What are the key concerns across the different stages of mining?*
- *Who are the key stakeholders and what are their concerns?*
- *Compare and contrast Philex's CSR programs in the different mine sites.*
- *How can the key lessons from this case be applied in your own CSR operations?*

SUMMARY SESSION PLAN (80-minute class)

- Brief background of Philex Mining Corporation (5 minutes)
    - Company History
    - Vision Mission
    - CSR Principles & Core Values
    - CSR Framework
- Regulatory Environment (5-10 minutes)
    - Government agencies and roles
    - Legislation & Compliance requirements for mining
- Case Facts & Stakeholder needs analysis per site (30 minutes)
    - Benguet
    - Surigao
    - Sipalay
- Compare and Contrast – Stakeholder needs & CSR approach per site (15-20 minutes)
- Key lessons & Application (20 minutes)
    1. There is no one-size-fits-all CSR program
    2. CSR must be responsive and suited to the specific needs of the community
    3. Stakeholder needs and concerns change not just across different sites, but also across different stages of the mining cycle
    4. How can you apply these lessons in your own particular role as a CSR practitioner?

Board Plan

Board 1: PMC – Internal & External Analysis of regulations & frameworks that affect CSR

External	Internal
Regulatory Environment, General public sentiment	PMC brief history (CSR embedded in vision mission)
Government Agencies & Roles	CSR Principles & Core Values
Legislation/Compliance requirements for mining	CSR Framework

Board 2: Case facts & Stakeholder needs analysis (Benguet)
Board 3: Case facts & Stakeholder needs analysis (Surigao)
Board 4: Case facts & Stakeholder needs analysis (Sipalay)
Board 5: Stakeholder needs – Comparison across different stages

For Boards 2-5, see Appendix. The board plans in the appendix may also be detached and distributed to the students as reference handouts after the session.

How to use this teaching note: Page References

The written analysis of case portion cites specific pages and charts referencing the original case for ease of use. Page references are in parentheses and cite the page and chart.

Page reference format sample: (TC5-6)

Page and Figure reference format sample: (TC5-6, Figure 3)

WRITTEN ANALYSIS OF CASE

Background of the Company

Philex Mining Corporation (PMC) was incorporated in 1955 and is one of the oldest and largest mining companies in the Philippines. Since its inception, the company has made a commitment to responsible mining practices beyond mere legal compliance and to contributing to community development and nation-building through its business. This commitment has made it one of the most respected and trusted companies in the Philippine mining industry. PMC was practicing progressive rehabilitation of mine sites even before this was required by law.

Early in its operations, Philex established its Environment and Community Relations Department (ECRD) to ensure that the company's environment protection and community development objectives would be met across their different mine sites. The VP of the ECRD department reported directly to the company president. The ECRD adhered to a CSR framework, but the implementation of their CSR programs differed from site to site, as the specific needs of each community varied.

Currently, the Philex Mining Corporation has mining activities in different parts of the Philippines, in different stages of mining-- exploration in Surigao, operation and production in Benguet, and care and maintenance and exploration in Negros Occidental.

Regulatory environment

The Philippine regulatory environment involved participation from both the public and private sector. In the public sector, the national government had several regulatory agencies that affected mining operations (see Figure 1). The national government also created and enforced legislation to regulate mining operations in the economy (see Table 1). Local government units at the provincial and municipal level were also involved in creating and implementing local ordinances and issuing local business permits.

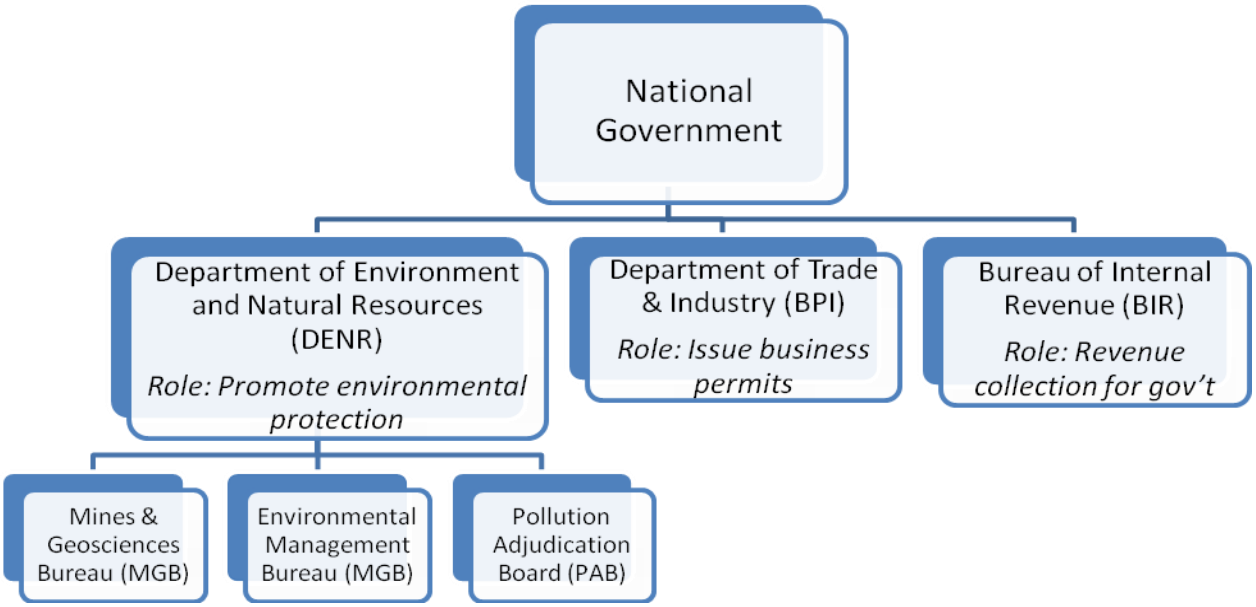


FIGURE 1.NATIONAL GOVERNMENT AGENCIES AND ROLES
Prepared by Case Writer using Case Facts (Reference Pages: TC5-2, TC3)

TABLE 1.SELECTED MINING COMPANY REQUIREMENTS MANDATED BY LAW

Revenue	-1% of milling and mining costs must be allocated to social development in the host area -1% of annual gross revenues paid as royalties to affected indigenous communities
Environment	-Submission of an environmental impact statement -Environmental compliance certificate -Environmental protection and enhancement program (EPEP) -Formation of a multi-partite monitoring team that would audit and ensure mining company's compliance with the law, particularly in terms of the EPEP
Local host communities	-Mining companies must secure free, prior and informed consent from affected communities prior to mining operations

Prepared by Case Writer using Case Facts (Reference Pages: TC5-2, TC3)

PMC's CSR Principles

PMC's CSR principles are embedded in its Vision-Mission (TC5-3), and guide the company in going beyond mere legislative compliance in environmental and community development matters. Environmental responsibility and Community Development are the company's core values.

PMC's vision is to become "a socially responsible Filipino company striving for excellence in mining," while their mission statement clearly states their commitment to:

- Their employees, by developing their skills and talents
- Their shareholders, by expanding mining operations and by continuing to improve operations to be more efficient and cost-effective

- Their host communities, by being socially responsible and supporting the community's development, and by protecting the environment, as well as by respecting the cultural practices of indigenous people
- The economy, by contributing to nation-building through profitable operations, social development, and environmental protection

CSR Framework of PMC

PMC created the Environment and Community Relations Department (ECRD) to design and implement its CSR programs. The ECRD consists of four working groups (TC5-6): 1) Environmental Engineering and Quality Monitoring, 2) Environmental Enhancement (Forestry), 3) Environmental Sanitation and Beautification, and 4) Community Development.
PMC's CSR Framework focuses on their core values of environmental responsibility and community development (TC5-4, Figure 1). By contributing to environmental protection and the social and economic progress of its partner communities, the company aims to achieve its mission of helping in national development.

Because of their focus on environmental protection, the company practices progressive rehabilitation, reforestation and adopts new practices and technology when possible. Their rehabilitated mine sites have won several awards for the quality of the forest rehabilitation.

PMC's focus on community development, on the other hand, meant that the company focused on economic development and improved basic social services in their host communities. The company wanted the community to eventually become self-reliant and not solely dependent on the income generated from mining activities in the area, because mineral resources would eventually run out.

The CSR strategy for community development is generally implemented in two stages (TC5-6, Figure 3): 1) Social preparation and 2) Community-based resource management. In the social preparation stage, the company focused on understanding the community's needs and coordinating with support agencies and the community to give priority to development projects. Philex hired community relations officers from the area to help them identify the community's needs and concerns. The community relations officers immerse and integrate themselves in the community to ensure that they can plan and facilitate programs that are appropriate to the needs of the people in the host area. In community-based resource management, the second phase of the community development strategy, Philex practices counterparting, where the company, the community, and support agencies work together on the projects the community wishes to pursue. The shared responsibility and shared ownership of the development programs aim to ensure cooperation among all parties involved.

Multi-site Implementation of CSR

A company's undertakings and responsibilities change across the different stages of mining (Figure 2) because the needs of the community change as well.

The case examines Philex's multi-site implementation of its CSR programs, and shows that while a CSR framework is necessary, it must be flexible enough to respond to the specific needs of a company's stakeholders.
Stakeholder concerns are affected not just by the different stages of mining, but also by historical, cultural, and economic factors unique to each community.

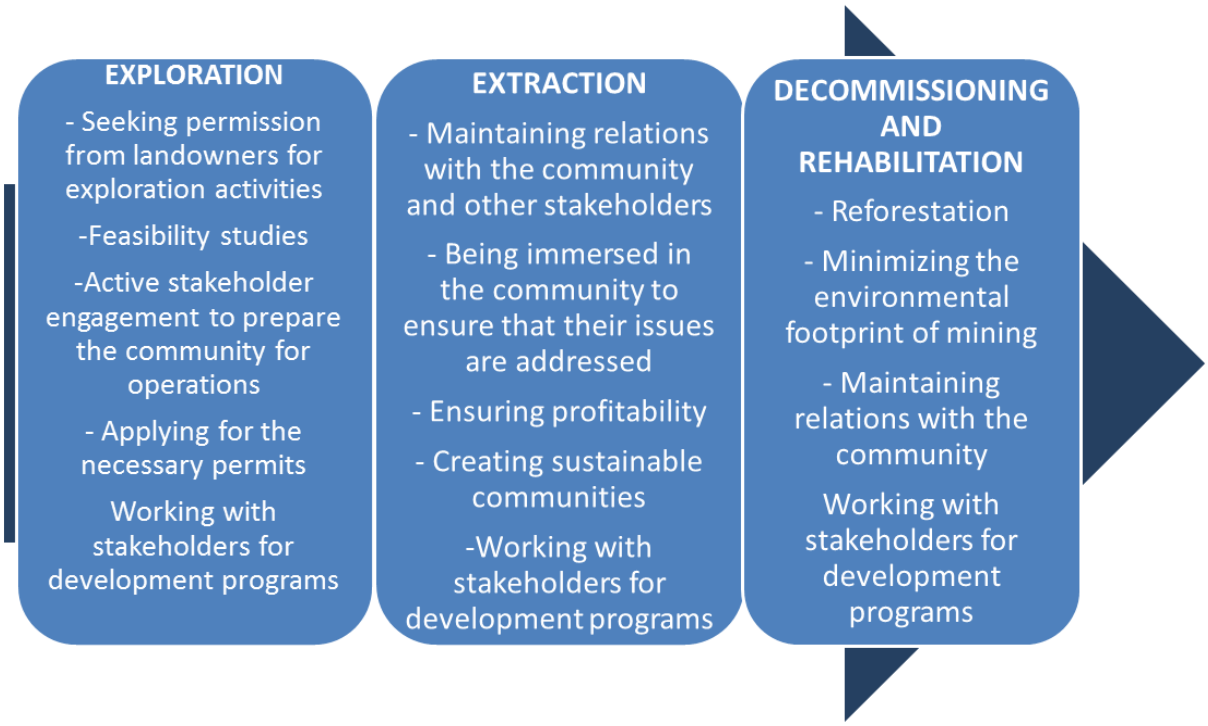


FIGURE 2.MINING COMPANY RESPONSIBILITIES ACROSS DIFFERENT MINING STAGES

Source: Herrera (APEC CSR Train the Trainers Program), 2012

Exploration in Surigao

Exploration in Surigao has been ongoing from 1999-2010, and as of 2012 figures, the area is estimated to have an ore reserve of 300 million tons at .06 copper and 1 gram gold per ton (TC5-12). The site could have more reserves than Philex's Padcal site, which has one of the largest and longest-running mining operations in the economy. However, a coal explosion and destructive tailings spill from past mining operations in the area have left strong anti-mining sentiments from certain groups in the community. Because of these legacy issues, local government units in the area are hesitant to approve and reinstate mining operations, despite the huge economic benefits they could bring to the largely undeveloped community. The area has a total population of about 2,000 households, most of whom work in the agricultural sector. The area faces problems such as high rates of unemployment, a lack of alternative sources of livelihood, undeveloped infrastructure, and poor water systems and waste management (TC5-13). The indigenous people in the area are already receiving royalties from another mining corporation, but there have been disagreements in the distribution of the funds among the different datus and their tribes.

The stage of the mining operations and the legacy issues specific to the Surigao site affect the concerns of the different stakeholders (Figure 3). Philex took these into consideration in crafting and implementing programs that suit the community's needs.

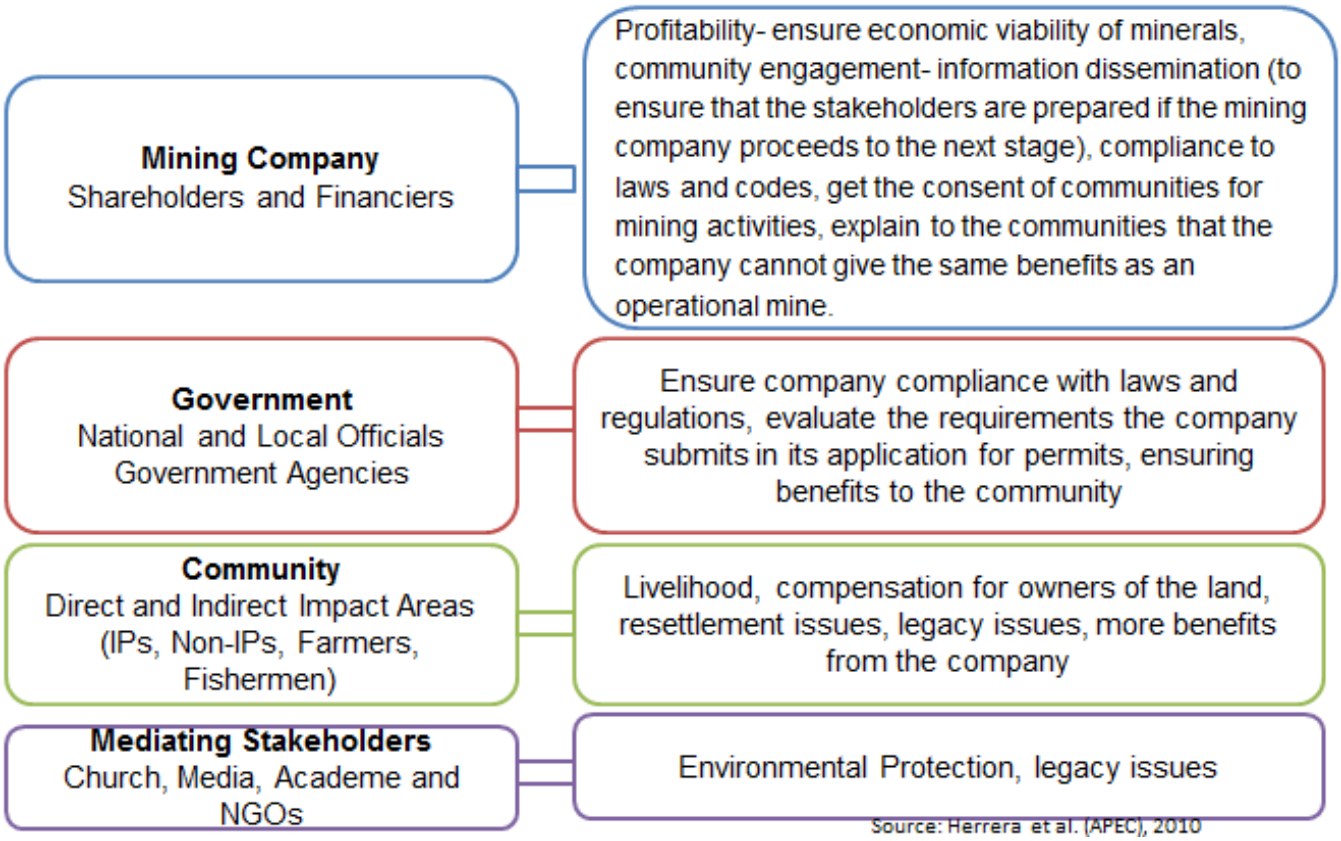


FIGURE 3.KEY STAKEHOLDERS AND CONCERNS (EXPLORATION IN SURIGAO)

Philex sent a community relations team to the area before exploration to speak with surface claimants and ensure that owners were amenable to drilling operations (TC5-13). PMC community development officers also immersed themselves in the community to gain a deeper understanding of the issues and concerns they faced. The company also brought local leaders to the Padcal site so they would have a better understanding of the economic benefits that mining could bring. This also enabled the leaders to see that PMC operated its mines in a responsible manner. Philex also facilitated the creation of a Community Technical Working Group (CTWG), to act as an environment and impact assessment team. The CWTG was composed of members from the Mining and Geosciences Bureau, Philex, LGUs, NGOs, and the academe. The group was tasked to ensure the active and meaningful participation of the communities in monitoring and improving the company's environmental and community development programs. The creation of this group was not required by law since the company was still in the exploration stage.

As a result of the input from the community, Philex implemented several programs to address the following concerns (TC5-14):

- Economic Development: Capacity building and leadership training for people's organizations and farmer groups.
- Environmental Protection: The company practices progressive rehabilitation even at the exploration stage. The company also has tree planting activities.
- Community Cooperation and Development: The company seeks clearance from the community for their exploration activities. They also provide scholarships for locals, including indigenous people. The company also practices counterparting with local groups in joint undertakings to build infrastructure for the community. PMC also organized and trained the Tribal Council through their Indigenous Peoples Volunteer Teacher- Organizer program.

Production in Benguet

The Padcal site is one of the longest-running mining operations in the economy, and has been one of the main sources of Philex revenues since 1958 (TC5-8). The company has generated about PhP10 billion in taxes (1956-2008) from the site. In 2008, Philex paid PhP29.5 million in excise taxes to the host barangays. The company employs 2,137 people at the site, and runs community and infrastructure development programs. Philex's operations and community development programs in the Padcal site have served as proof of the company's commitment to corporate social responsibility. This has helped establish the company's reputation among different stakeholders, making it easier for the company to gain the trust of LGUs and local communities as they expand and explore other mine sites.

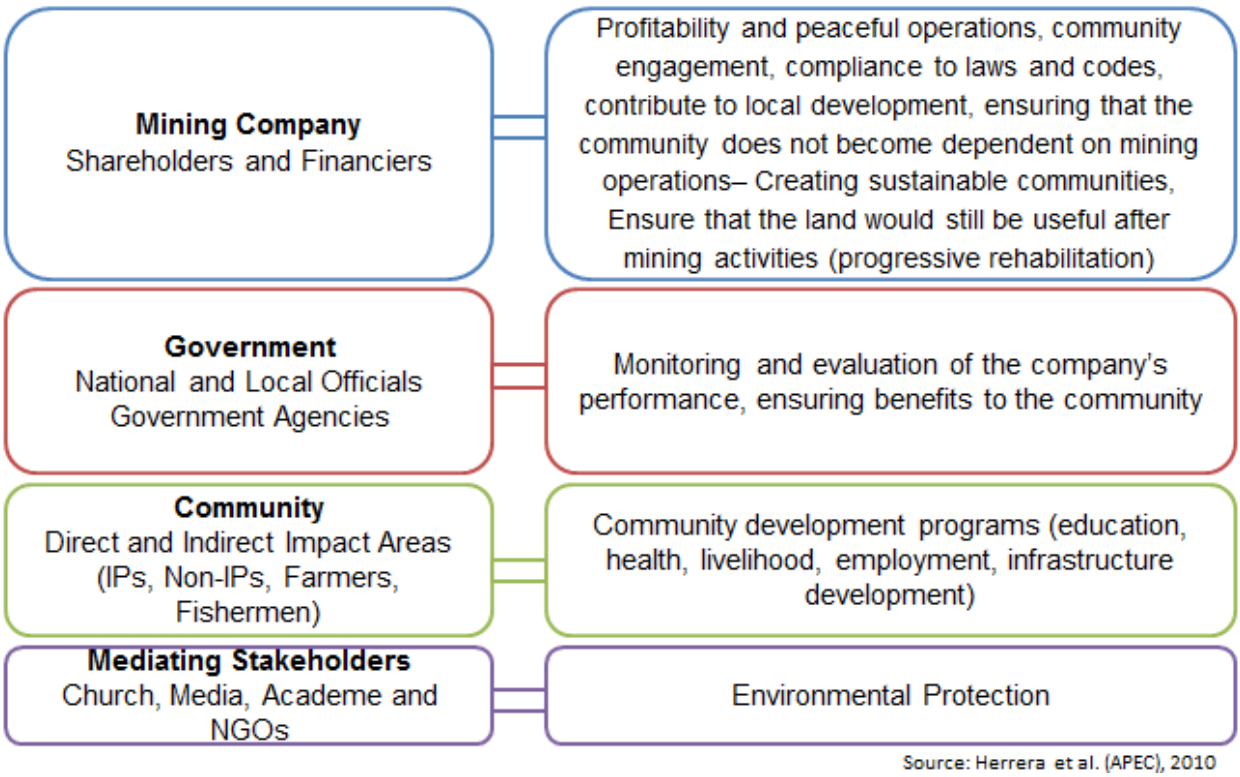


FIGURE 4.KEY STAKEHOLDERS AND CONCERNS (EXTRACTION IN BENGUET)

The following programs and initiatives highlight Philex's commitment to CSR in the Padcal site (TC5-9, 10):

- The company spent more than the required amount for its social development and management plan (SDMP) in the area, proving that CSR is not just about compliance with local legislation.
- Environmental Protection: Reforestation and progressive rehabilitation. PMC has converted its old tailings ponds into a bamboo research plantation and a controlled community dump site. The Padcal site is also the first ISO 14001 certified mine in the Philippines. In addition, from 1967-2008, the firm has spent Php2.5 billion for environmental protection (5.7 percent of milling and mining cost, beyond the required 3 percent).
- Community Development: PMC provides scholarships, basic health services, livelihood activities/training and contributes to infrastructure development in the community (roads, water systems, school buildings, churches, clinics).

Rehabilitation (and Exploration) in Negros Occidental

The Bulawan gold mine in Negros Occidental was operational from 1996-2002, and was closed due to its lack of economic viability (TC5-10). Employees were compensated when the mine closed. However, because the site employed 3,000 people before it was closed, many local business closed as well and people moved to other towns when the mine shut down. In response to this, PMC's community relations officers are working with locals to find alternate sources of livelihood for the area. PMC also ensured that the site was well-managed even after closure, and they implemented rehabilitation and maintenance programs in the area.

After closure, the company continued to maintain close relationships with its stakeholders. PMC sent community relations officers stay with the community a few days a week. The company believed that it was important to do this because future developments might mean that operations could again be commercially viable at the site. This move also allowed the company to monitor the activities of anti-mining groups in the area, as there continued to be legacy issues in Sipalay from other mining companies that abandoned the site before Philex's operations in 1996.

In 2010, PMC resumed exploration activities in the area. Despite having permits, Philex's community relations officers talked to the community and secured their informed consent before beginning initial drilling operations.

FIGURE 5: KEY STAKEHOLDERS AND CONCERNS (REHABILITATION & EXPLORATION IN NEGROS)

A key concern for a company in the exploration stage is that cash flows from the site are still negative. This means that the company does not have that many resources to spend on community development programs, and must decide which community needs should be given priority in its CSR initiatives.

In the Sipalay site, Philex worked with the community in the following undertakings (TC5-11, 12):

- Economic Support: The company is working with local groups and NGOs to find alternative sources of livelihood for the community.
- Environmental Protection: The company has reforested 442 hectares and has received several “Best Forest” awards. The local DENR also said that the company helped protect the area from illegal loggers. Philex employees at the site regularly monitor existing tailings and silt ponds.
- Community Development: Although it has less money allocated for the community since the mine is not operational, PMC continues to provide basic health and education programs. The company also assists in building infrastructure in partnership with the government and the community.

Stakeholders and Concerns: A comparison across the stages

Although CSR implementation differs across mine sites because of the mining stage and the local political, social and economic circumstances, some key stakeholders remain consistent.

The firm will always be concerned with contributing to local development and complying with laws and regulations to ensure profitability and continued operations. The government will monitor compliance with regulations and ensure that mining brings social and economic benefits to the community and the economy while mitigating the risks of damage to the environment.

Across all mine sites, the community will always be concerned with not getting the short end of the stick—mining can bring many economic benefits to a community, but it is the community that is at the greatest risk and will bear the biggest burden if mining companies do business irresponsibly. It is the community that will have to live with the environmental damage in their area, and the costs associated with that (health care, lost livelihood, etc). Mining companies must hold themselves deeply accountable to these communities, because without their support, the firm cannot sustain profitable operations.

Although a company’s CSR framework can serve as a guide for implementation, the company must always take into consideration the specific needs of each community to craft CSR programs that will create a meaningful impact on the people, and will allow the company to profitably continue operations in the area.

TABLE 2.STAKEHOLDERS AND KEY CONCERNS

Stakeholder	Concerns
Mining Company	Profitability, maintaining a healthy relationship with stakeholders to ensure continuous operations, contribute to local development, compliance to laws and regulations
Government	Monitor compliance to laws, assistance in addressing social issues, environmental protection, ensuring economic benefits
Community	Social development programs and environmental protection.
Mediating Stakeholders	Environmental protection

***Some concerns such as the need for livelihood and legacy issues are more site dependent rather than stage dependent*

Source: Herrera (APEC CSR Train the Trainers Program), 2012

SESSION PLAN DETAILS AND KEY MESSAGES

Brief background of Philex Mining Corporation (5 minutes)

Key message: CSR is embedded in the company's history, vision mission, organizational set-up, and business practices

i. Company History
   - Philex Mining Corporation (PMC) was incorporated in 1955
   - PMC operates one of the longest running mines in the Philippines– the Padcal site (Benguet) has been operational for more than 50 years
   - Since its inception, PMC has been committed to adhering to responsible mining practices
   - The company has a separate division exclusively for CSR, the Environment and Community Relations Department (ECRD). The VP for ECRD reports directly to the president of PMC
   - Philex Mining Corporation has mining activities in different parts of the Philippines in different stages of mining– Exploration in Surigao, Operation/Production in Benguet, Rehabilitation (and Exploration) in Sipalay

ii. Vision Mission
   - Vision: A socially responsible Filipino company striving for excellence in mining.
   - Mission (refer to TC5-3 of case)

iii. CSR Principles & Core Values
   - Core values: Environmental Responsibility and Community Development, to help the Philippines progress (nation-building)
   - Environment: progressive rehabilitation, reforestation and adopts new practices and technology
   - Community: CSR is implemented in two stages: 1) Social preparation and 2) Community-based resource management
   - The company practices immersion and counterparting as tools to aid in community development initiatives
   - CSR Framework (See Appendix)

Regulatory Environment (5-10 minutes)

i. Government agencies and roles (See Figure 1 of this teaching note)
ii. Legislation & Compliance requirements for mining (See Table 1 of this teaching note)

Case Facts & Stakeholder needs analysis per site (30 minutes) (See Appendix)

Key message: Stakeholder needs and concerns vary per site and across the different mining stages. Unique social, economic, and historical factors (legacy issues) play a significant role in shaping the concerns of each community.

i. Production in Benguet
ii. Exploration in Surigao
iii. Care and Maintenance in Sipalay

Compare and Contrast – Stakeholder needs & CSR approach per site (15-20 minutes)

Key message: Stakeholder needs and concerns vary per site and across the different mining stages. Unique social, economic, and historical factors (legacy issues) play a significant role in shaping the concerns of each community.

Key lessons & Application (20 minutes)

i. There is no one-size-fits-all CSR program
ii. CSR must be responsive and suited to the specific needs of the community
iii. Stakeholder needs and concerns change not just across different sites, but also across different stages of the mining cycle
iv. How can you apply these lessons in your own particular role as a CSR practitioner?

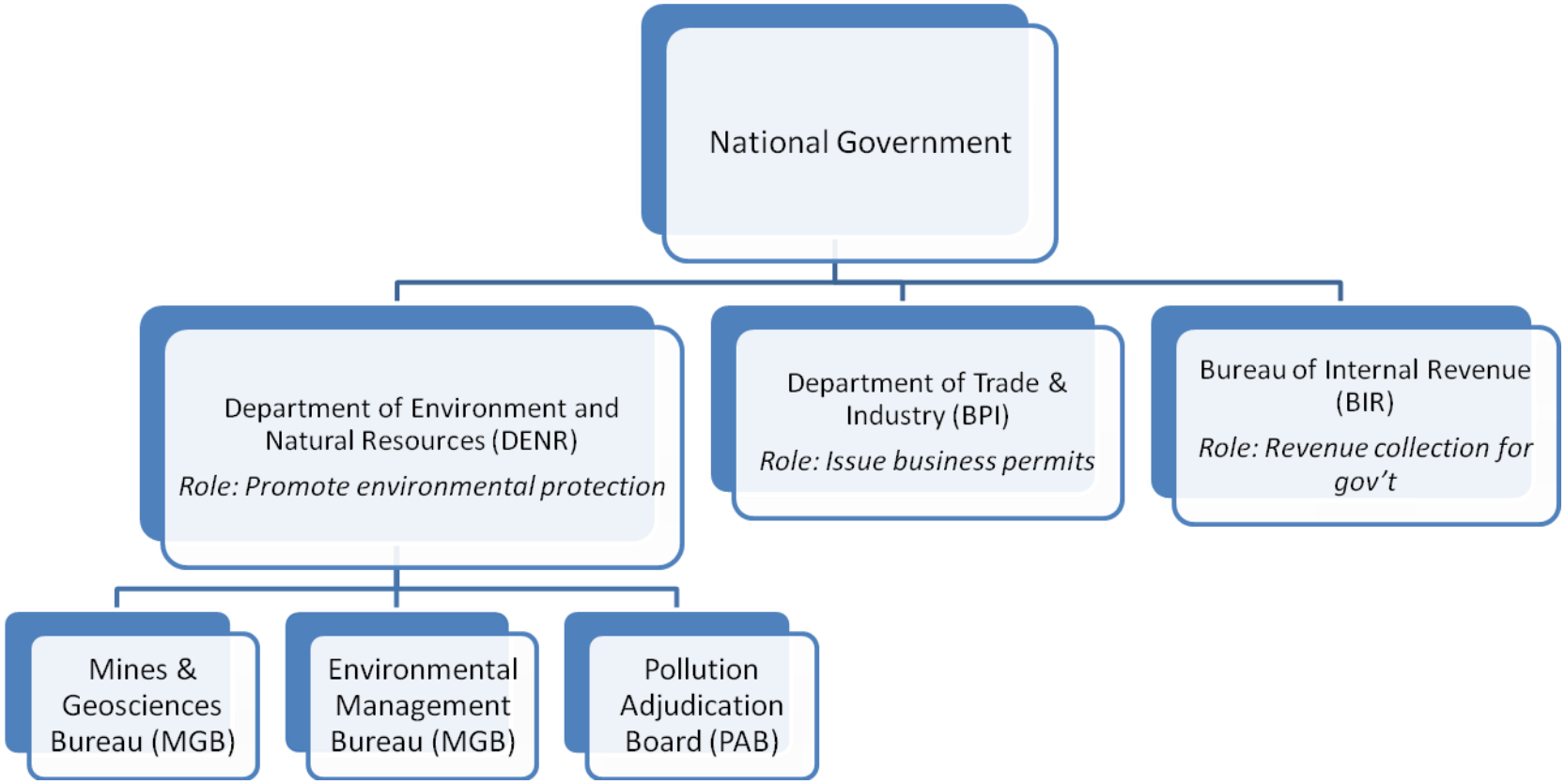
APPENDICES

These appendices may be detached and used as handouts after the discussion

APPENDIX A: APMC'S CSR FRAMEWORK

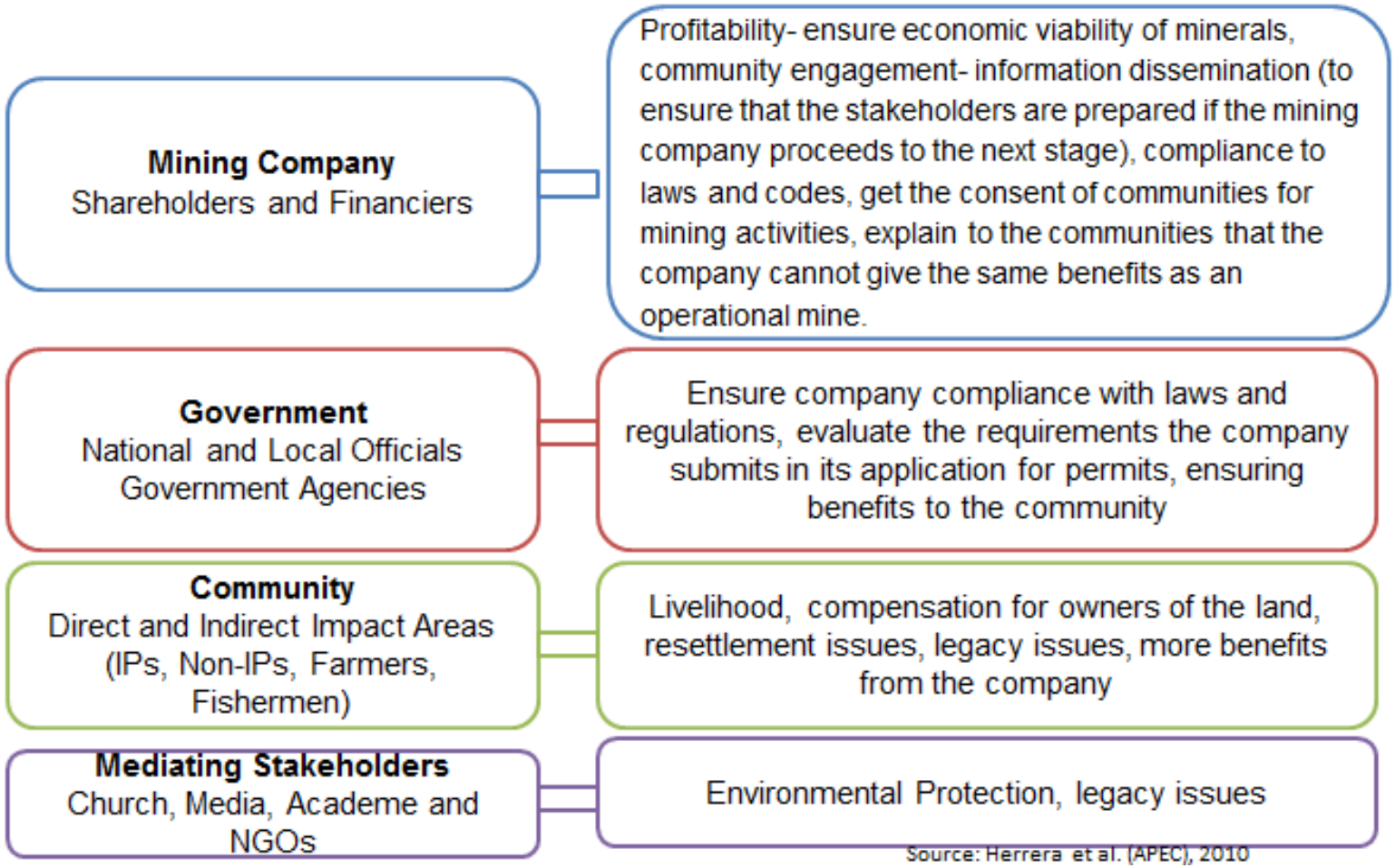
Source: Philex Mining Corporation, Philex Social Development Policy

APPENDIX B: PHILIPPINE GOVERNMENT ORGANIZATIONS AND ROLES (MINING INDUSTRY)



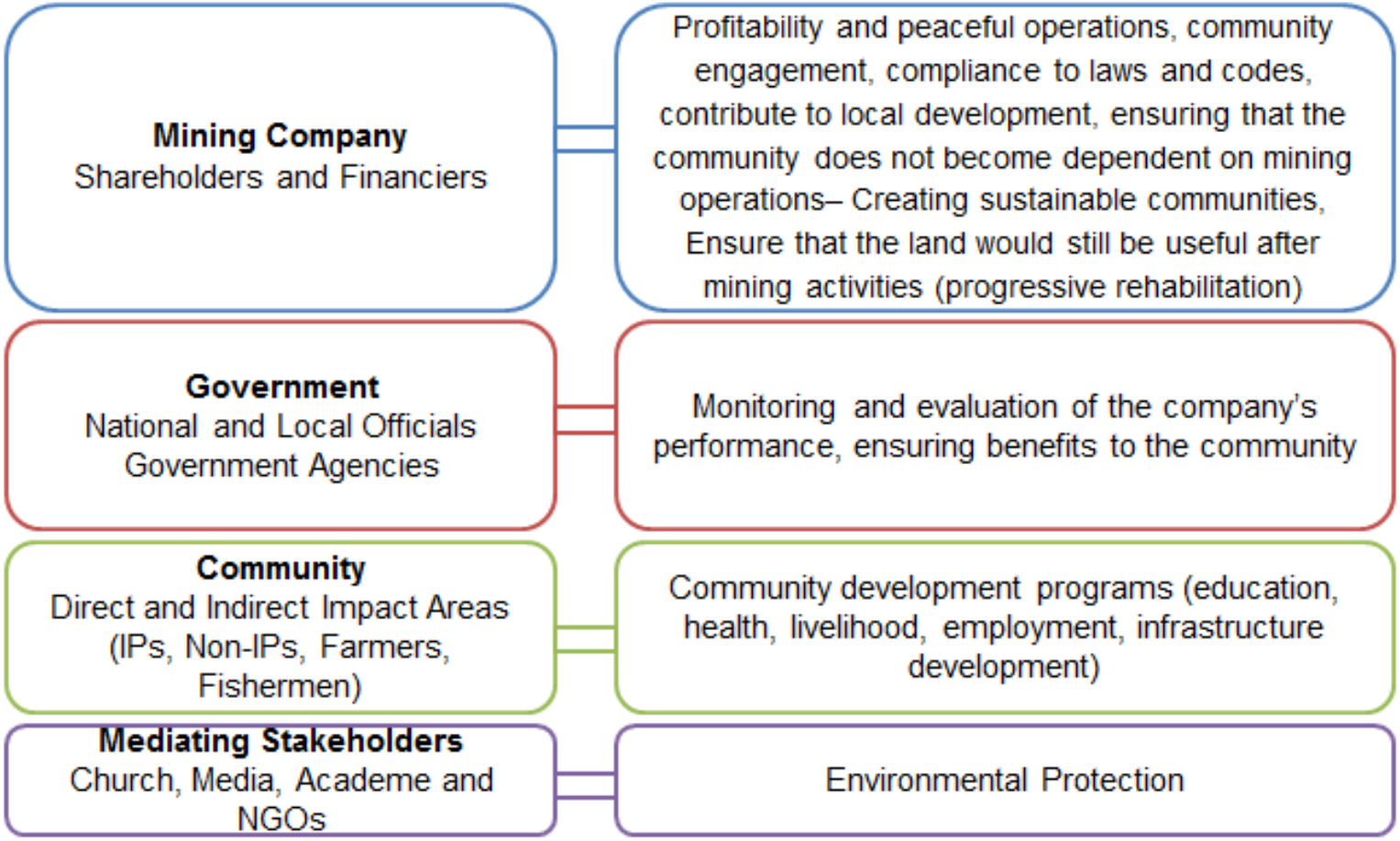
Herrera, T. (2012)

APPENDIX C: EXPLORATION IN SURIGAO: KEY STAKEHOLDERS AND CONCERNS



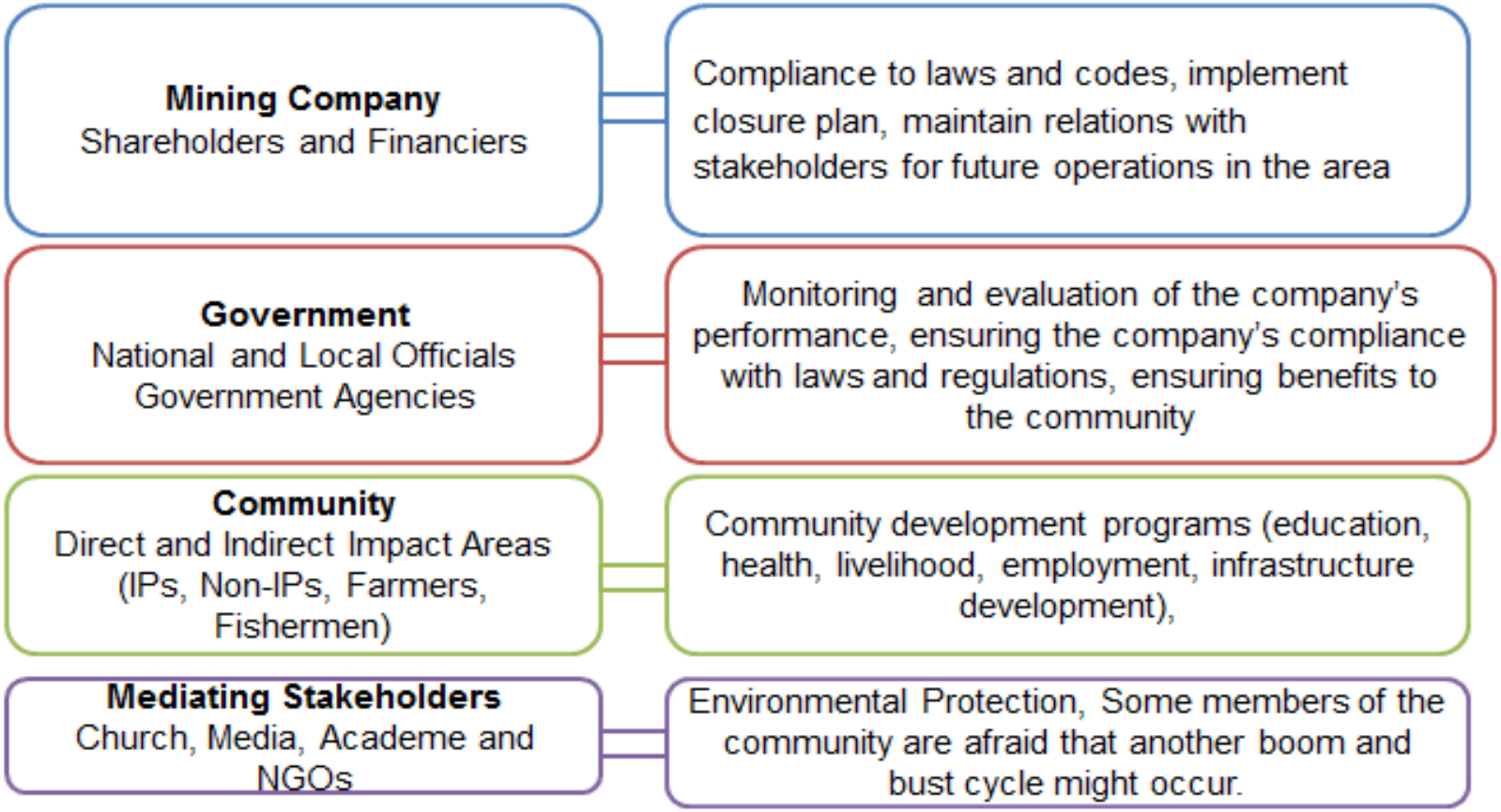
Source: Herrera et al. (APEC), 2010

APPENDIX D: PRODUCTION IN BENGUET: KEY STAKEHOLDERS AND CONCERNS



Source: Herrera et al. (APEC), 2010

APPENDIX E: REHABILITATION AND EXPLORATION IN NEGROS OCCIDENTAL: KEY STAKEHOLDERS AND CONCERNS



Disclaimer:

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