The Palawan Chamber advocates responsible, environmentally sensitive mining when it meets all local and national legal requirements and reflects a comprehensive, well-planned strategy to ensure long-term growth and productivity in local communities. By confronting environmental challenges in partnership with government, NGOs and local communities mining companies can help build sustainable environments wherever they operate.

The Palawan Chamber believes good environmental stewardship involves avoiding, minimizing and mitigating negative environmental impacts at every stage of the mining lifecycle and maximizing positive environmental contributions. Using a holistic view of environmental management allows mining companies to focus on biodiversity, energy and climate change, water and waste management, and the relationships that exist between them.

The key elements in the Chamber’s advocacy are:

1. **Minimize Environmental Impact:**

   - **Protect and preserve biodiversity**
     
     The scientific community recognizes that more than its inanimate mineral wealth, Palawan’s living wealth, its biodiversity, especially its marine, forest and fauna biodiversity, due to its unique natural conditions, is among the highest, if not the highest in certain aspects, in the world. This distinction must be at the forefront in undertaking any mineral extraction activity to minimize the risks from mine waste siltation and pollution.

   - **Integrating Biodiversity into the Mining Life Cycle**
     
     Incorporating Palawan’s Biodiversity into phases of the mining life cycle is an important step mining companies can take towards assessing and measuring the impacts of their operations on
biodiversity. The **attached flowchart** incorporates existing processes, flows and management objectives with additional considerations during the mining life cycle process. This serves to improve biodiversity checks in the mining life cycle and add value to the project as a whole by means of biodiversity risk reduction and/or mitigation.

The integration of biodiversity management in the first phase of the mining cycle (as shown in the attached flowchart) is through the initiation of feasibility studies and environmental and social impact assessments. A preliminary baseline examination encompassing the physical, biological and socioeconomic environment in the form of an Environment Impact Assessment (EIA) is proposed as a means of starting the assessment and preparation phase. The purpose of an EIA at this stage of mining life cycle process would be to:

- Compile a Biodiversity Action Plan (BAP) to monitor key biodiversity indicators and highlight any mitigation measures, and offsets in a biodiversity management matrix
- Start stakeholder consultation so that stakeholder concerns are incorporated in the preliminary stages and resources can be allocated effectively
- Using the EIA report as a “table of contents” for all other studies and activities to follow

The advantage of adding the EIA report before commencing any other studies is twofold: it establishes a gradual dialogue with regulators and other stakeholders and creates breathing space where legal requirements and established guidelines can be understood and discussed between parties; it also gives mining companies a view of the types of assessments required by law and allows them to efficiently utilize resources.

Upon successful completion and approval of the EIA report a detailed environmental impact study (EIS) can begin. This process includes allocating resources for critical analyses such as site feasibility studies, an environmental baseline survey, environmental and social impact assessment and a mine closure rehabilitation strategy plan. Since stakeholder consultation and the biodiversity management matrix have already been compiled in the EIA report, the impetus is to further refine the above studies through the development of detailed impact assessments, identification of alternative technologies and mitigation measures to lessen impacts and, where necessary, offsite mitigation plans (offsets).
The inclusion of a Geographical Information Systems (GIS) component at this stage of the mining life cycle as part of the environmental management system is a useful resource mapping tool that complements the environment management plan (EMP). Some advantages of incorporating GIS before the submission of EIS studies and the EMP include:

- Creating resource mapping of water resources, ecology, biodiversity indicators, vegetation cover, community settlements, and roads for rapid query and display
- To analyze all surveys and studies conducted, identify impacts and alternative technologies and address mitigation measures to lessen impacts as part of a decision support system
- For project managers and decision makers biodiversity indicator mapping is useful because it complements other resource mapping to answer important queries and concerns such as:
  - Regulation of water extraction in areas with high concentrations of naturally occurring species
  - Minimize ecological disturbances (minimal vehicular activity, camp sites) in species rich areas
  - Air emission and noise monitoring and impact on local wildlife
- For monitoring and reporting purposes a GIS framework can also be used to reflect the amount of change (deviation) in a particular resource from the environmental management plan. Since a GIS uses a database to store records it is also a valuable tool for monitoring and reporting site activity till site closure

For phase two (operations) and phase three (rehabilitation and closure) the addition of GIS to the existing monitoring, reporting and rehabilitation tools is highly recommended. GIS would be useful after operations have ceased and where pre- and post-project biodiversity can be measured and compared.

- **Minimize water, air and soil pollution**

The Chamber recognizes the need to properly value the nearly limitless contributions which Palawan’s ecosystems make to a clean, safe, and abundant water supply for domestic, irrigation, and industrial needs and their role in preventing soil erosion and siltation, in mitigating floods, droughts, and landslides and other impacts of climate change.
and extreme weather, in protecting coral reefs and mangroves, in providing soil and food nutrients, boosting farm productivity, and enhancing human nutrition, in providing natural cures, in mitigating water, soil, and air pollution. The effect of the proposed mining strategies will either maintain or increase the quantity and quality of water supplies while mitigating pollution.

2. Regulation and Enforcement:

- **Strict enforcement of existing mining laws and regulations**
  - Government must strengthen the organizational and financial capacity of regulatory agencies.
  - Encourage and ensure compliance with Palawan’s Strategic Environmental Plan (SEP) with rigorous adherence to conditions specified in the SEP Clearance.
  - Ensure compliance with the requirements and conditions of DENR’s Environmental Compliance Certificate (ECC) and adherence to the terms of the Mineral Production Sharing Agreement (MPSA).
  - Restructure the Multipartite Monitoring Team (MMT) which conducts regular monitoring to include representation from:
    i. the affected communities,
    ii. the indigenous people (IPs)
    iii. local Barangay (LGU), and relevant NGOs
    - And ensure transparent access to all monitoring reports including the recommendations of the MMT.

- **Synchronize the roles of national and local government in the endorsement and regulation of mining projects**
  - Government needs to harmonize both national and local policies and interests on mining to encourage legitimate long-term responsible mining in the country.
  - All levels of government validating/participating in the endorsement of mining activities on Palawan must also bear a degree of responsibility and accountability for environmental protection and rehabilitation initiatives. Endorsement of mining activities should be viewed as an authentic partnership with the mining company.
Allocate mining claims through a competitive bidding process and only within the zones specified in Palawan’s Environmentally Critical Areas Network (ECAN).

Ensure the Prequalification, Bids and Awards Committee (PBAC) considering competitive bids for mining claims on Palawan include a representative of the **Palawan Council for Sustainable Development (PCSD)** in addition to those from the Mines and Geosciences Bureau (MGB).

Do not allow illegal small-scale mining operations.

3. **Maximize value-added components in the value chain:**

   - **Ban crude mineral exports**
     To maximize the beneficial impact of mineral extraction in Palawan, export only finished mineral-based products.

   - **Mining downstream policy**
     Palawan should encourage a pro-development policy of fully processing extracted minerals into pure metals or finished products, such as machines or electronic devices. Processing has the potential to increase the value 100 to 400 times with concurrent and equivalent increases in jobs and incomes when compared to simply exporting raw ore.

     Only with the addition of value-added processing will Palawan be able to realize the full potential of its mineral extraction sector to reduce poverty and enhance economic development.

   - **Mining upstream policy**
     Mining is a capital intensive industry. According to the government's Annual Survey of Business and Industry, about 75% of the value of output from large-scale mining is used to pay non-labor costs, such as equipment, most of which is imported and expensive. Importation deprives the country of the potential for developing upstream industries that can otherwise supply these inputs on more affordable terms, and provide quality local jobs.

4. **Increase national and local government shares**

   - To retain a more equitable share of the value of extracted minerals, government should address the tax and export leakages in illegal mining and the small-scale mining sector to retain a larger share of mining revenues.
• Strongly recommend review of revenue sharing policies, particularly by certifying as urgent House Bill No. 4410 which addresses the direct remittance to LGUs of the 40-percent local government share in mining taxes.

5. Remediation, Rehabilitation and Restoration:

• Mining establishments in partnership with local communities should develop a set of standard guidelines for the prevention, mitigation, elimination, and correction of any environmental and social damage that may occur during mining operation at the mine site and in affected communities. These guidelines will serve as the basis for fairly valuing any damages and specifying modes of payment to minimize spurious claims and unwarranted litigation.

• To promote responsible mining on Palawan, mining companies, in close consultation with local stakeholders, must be required to develop and submit an approved scientific and comprehensive rehabilitation or restoration plan in areas being mined and implement said program at the company’s expense. Rehabilitation and restoration may be simultaneous with ongoing mining activities but must be completed within a year following cessation of extraction activities. The rehabilitation and restoration plan should be a part of the application for a mining claim and available upon application.

6. Mine Closure Planning:

• Mine closure planning involves planning effectively for the after-mining period – all activities required before, during, and after the operating life of a mine that are needed to economically produce an acceptable landscape. Closure performance refers to the activities near and after mine closure and how well activities listed in the closure plan are carried out.

• A mine begins to close the day it opens. Decisions made during the mine planning and development phase (phase I) – and even earlier, during the exploration phase – have profound effects on the ultimate closure plan, its cost, and the resulting landscape performance. These decisions need to be made within a framework of closure planning to realize successful land reclamation.

• Activities related to closure planning include: preparation of detailed drawings of disturbed landscape, compilation of baseline information,
discussions with regulators and stakeholders on end land use considerations, designing supporting EIS research programs, and preparation of budgets and schedules. For a mine nearing closure, the closure plan takes the form of a decommissioning plan, and includes details and selection of remedial technologies and other specific reclamation and closure procedures.

- A critical element of successful reclamation and of good closure planning is stakeholder involvement. A particularly useful consultation process involves forming a local committee to provide guidance to one or more mines in the region in their reclamation and closure activities with a focus on providing ongoing dialog with stakeholders and identifying the goals important to stakeholders.

7. **Impact on Communities:**

- The Chamber suggests a minimal goal “to do no harm.” We now live in a world of scarcer and increasingly degraded natural resources, severe environmental problems from unabated consumerism and unsustainable lifestyles, and a deepening social dilemma driving more people into poverty.
- We must protect Palawan’s indigenous people and communities. For centuries these native peoples have been responsible for protecting, governing, and nurturing the forests and other reservoirs of natural wealth, but in recent generations have become largely disenfranchised, and their indigenous wisdom and ways of governance either marginalized or corrupted.
- Total human development must be at the core of each and every well-crafted policy, including those environmental and social policies directed to the mining sector. Anything less is not acceptable and will continue to generate conflict. The Social Development Programs in mining communities must address these issues and prioritize the needs of each community.

8. **Corporate Social Responsibility:**

- Each mining firm’s corporate social responsibility (CSR) program must be culturally sensitive, meet basic needs and have elements ensuring community viability following mine closure. Social acceptability must be more than social development programs as they are currently designed. Roads, hospitals, scholarships, day care centers, and schools must be supplemented with programs which ensure long-term economic viability
and initiative. The Chamber also suggests that CSP initiatives should look beyond the communities in which mining activities take place and include priority projects which affect citizens at the municipal and provincial levels. Such projects might include:

- tertiary healthcare facilities at the provincial level;
- juvenile and out-of-school youth rehabilitation facilities;
- a university-based research and teaching degree program highlighting environmental restoration, rehabilitation and preservation of biodiversity;
- community-based livelihood initiatives.

- Mining firms must be proactive and responsive to issues such as where and how mine wastes and tailings are disposed, how quality water sources for domestic and irrigation needs are assured, how forest and biodiversity losses are addressed, how the impact of climate change is not further exacerbated, how engagements with indigenous communities do not fracture cultural integrity, how economic benefits genuinely translate into human development, and how capacities are built in society that move the country forward.

9. Standards in the Mining Industry

- The Chamber recommends that all mining companies operating on Palawan be required to adopt and adhere to internationally recognized standards in the following areas:
  - Mining Procedures and Practices
  - Mine Safety
  - Environmental Protection and Compliance (ISO 14001)
  - Corporate Social Responsibility
  - Management and Administrative Procedures

As an officially recognized and respected organization, the International Organization for Standardization (ISO) offers training and accreditation in each of these areas.
References


**Initial Biodiversity Assessment & Planning (IBAP)**

**The Environmental Impact of Macroeconomic Policies on the Mining and Quarrying Sector in Palawan Province.** 1999, Danilo C. Israel, Adelwisa Sandalo, Aida Torres.


**DeBeers Mining Co.**

**Losses of and Impacts on Biodiversity** http://www.businessandbiodiversity.org/mining.html
Integrating Biodiversity into the Mining Life Cycle

**PHASE ONE: Exploration/Design Development**
- Screening to Establish Need for Environmental Assessment
- Begin Environmental Impact Exam (EIA)
- Set Scope of EIA
- Understand Legal Requirements and Guidelines
- Preliminary Baseline Data Collection
- Phase 1 Habitat Surveys/Geological Surveys
- Determine Key Biodiversity Components
- Create Biodiversity Management Matrix
- Complete Biodiversity Action Plan (BAP)
- Create EIA Report
- Does Site Pose a Risk to Biodiversity
  - Yes: Integrate BAP into EIA Report
  - No: Submit EIA for Approval
- Set Environmental Assessment Parameters
- Initiate Detailed Field Surveys for the Physical, Biological and Socioeconomic Environment
- Start Site Feasibility Studies
- Draft Biodiversity Site Assessment/BAP
- Start Environmental Baseline Study

**PHASE TWO: OPERATIONS**
- Review Biodiversity Management Matrix
- Define Appropriate Mitigation Measures
- Submit Additional Data Revised Assessment Required
- Start Strategic Environmental Assessment (SEA) Studies
- Submit Final EIA Report
- Finalize Biodiversity Site Assessment/BAP
- Finalize Site Baseline Study
- Finalize Biodiversity Site Assessment/BAP
- Finalize Environmental Impact Assessment (EIA) and Finalize Biodiversity Impact Assessment (BIA) into EIA Report
- Create GIS to represent ecological and resource mapping
- Develop Environmental Management Plan (EMP) and Environmental Management System (EMS): Integrate GIS Component into EMS
- Review Impacts and Alternative Technologies to Mitigate and Update EMP and MCSP
- EIA Approved by DENR/PCSD Governing Authorities
- Finalize and Submit SEA Reports
- Do Project Activity Create a Change in Biodiversity and Resource Indicators?
  - Yes: Continue Projects
  - No: Monitor Pre-project biodiversity and environmental impacts with post-operation stage using EMP/EMPS and GIS

**PHASE THREE: Rehabilitation and Closure**
- Monitor Pre-project biodiversity and environmental impacts with post-operation stage using EMP/EMPS and GIS
- Sustainable Native Ecosystem = Pre-existing Ecosystem
- Does site pose deviations from EMP Indicators?
  - Yes: Revise EMP and MCSP to Minimize EMP Deviations in Biodiversity and Resource Uptake by Reducing EMP in Phase 1 & 2
- Draft Environmental Monitoring Report Including Biodiversity Report
- Finalize Site Closure
- End of Project
- Determine Post-Project Post Ecosystem Stability
- Review Final Site Closure Plan

**Does this activity create a change in biodiversity and resource indicators?**
- Yes: Continue Projects
- No: Monitor Pre-project biodiversity and environmental impacts with post-operation stage using EMP/EMPS and GIS