

Biodiversity Offsets

A Mining Company Perspective

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Photo courtesy of FFI

Rio Tinto Group



A broad geographic spread of operations



Significance of Biodiversity to Rio Tinto

- 35,000 km² of land held as part of mining tenements
 - only 10% 'needed' for mining
- 1,112 km² disturbed for operational purposes.
 - 401 km² rehabilitated to the end of 2006
- Good experiences from new projects
 - QMM Madagascar
 - Diavik
 - Simandou Guinea
- Society's expectations
 - GMI and MMSD
 - 2010 Biodiversity target
 - ICMM-IUCN dialogue
- Window on the SD debate
- Ethical arguments



Elements of a business case

The Traditional Elements

- Cost Reduction
- Risk Reduction
- Revenue Growth
- New Opportunity



The Emerging Approach

- Access to land, sea and related natural resources (directly, or through supply chains)
- Legal and social (functional) license to operate
- Access to capital and insurance
- Access to markets for products (old and new)
- Access to human capital
- A seat at Policy development tables

Net Positive Impact: the Position Statement and Principles

“Rio Tinto aims to have a net positive impact on biodiversity by minimising the negative impacts of its activities and by making appropriate contributions to conservation in the regions in which it operates.”



- Delivering on this aim will require both impacts and positive actions to be measured
- A means of aggregating data across the Rio Tinto operations needs to be developed
- The use of biodiversity offsets will be important in achieving this aim

What are Biodiversity Offsets

“Conservation actions intended to compensate for the residual, unavoidable harm to biodiversity caused by development projects, so as to ensure no net loss of biodiversity. Before developers contemplate offsets, they should have first sought to avoid and minimise harm to biodiversity.”

(Insight & IUCN, 2004)

Biodiversity Offset a potted History

- First formalised in 1970s: USA system of wetland mitigation.
- Now legislation in numerous countries and regions:
 - USA,
 - Canada,
 - Europe (25),
 - Brazil,
 - Switzerland,
 - Australia and
 - discussions in New Zealand, Uganda and Mexico, etc.
- Investor interest (IFC, Equator Banks, fund managers)
- Companies, industry associations, multi-stakeholder initiatives

What Constitutes an Offset?

The nature of the offset will vary from situation to situation but should focus on compensating for the biodiversity value (species, habitats or ecosystems) that is impacted through development.

Offsets could include:

- The creation, restoration or conservation of pieces of land set aside for the conservation of biodiversity value.
- In certain situations, however, targeted conservation actions on threatened species, may provide better offset outcomes than a land acquisition.

Key Point

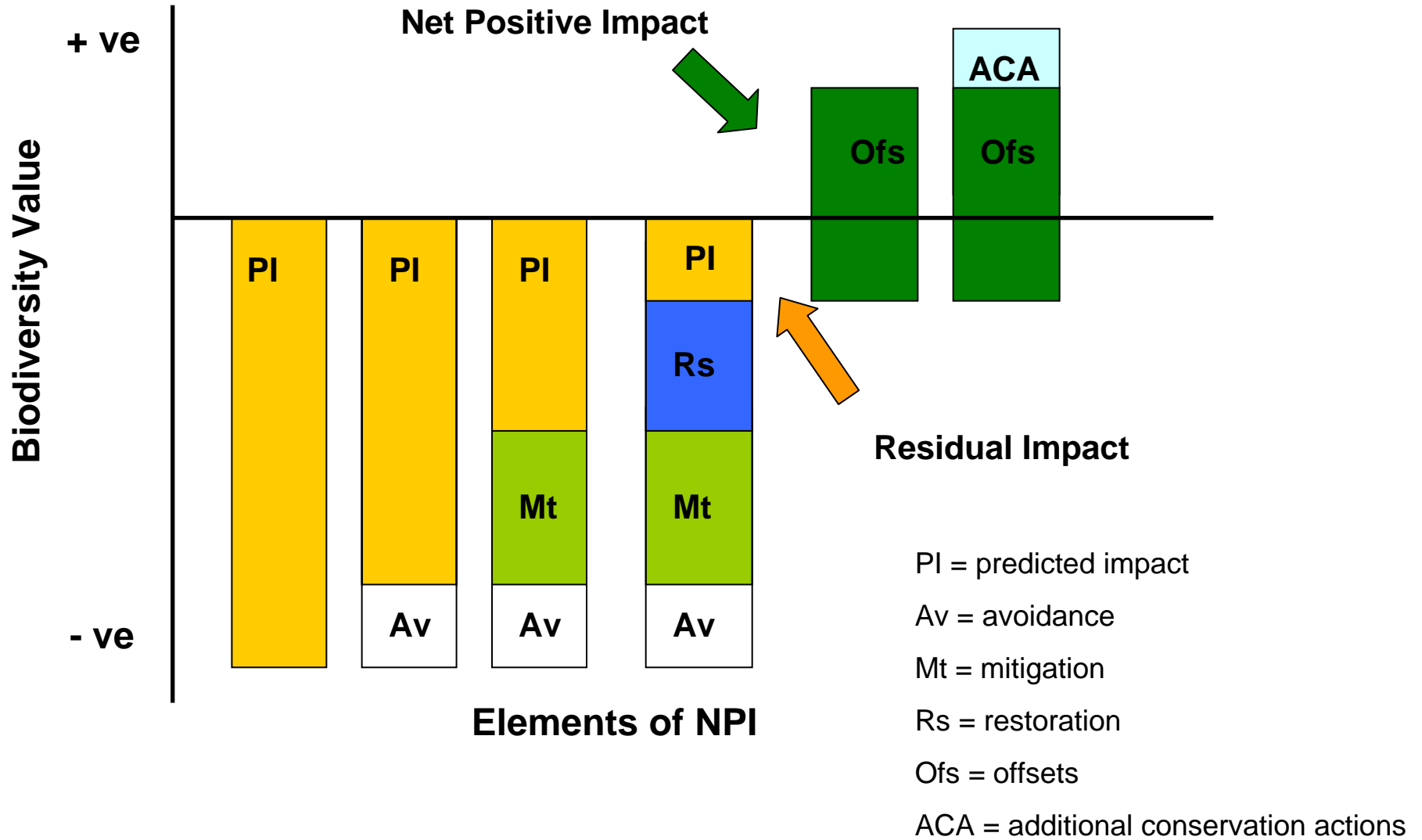
Biodiversity Offsets need to demonstrate Additionally

When are Biodiversity Offsets not Appropriate

There are at least three major cases when an offset is not appropriate:

- If impacts of the operation are unacceptable on irreplaceable biodiversity values eg extinction of site endemics, sites of religious or cultural importance.
- If an offset is seen as being used as a “license to trash”.
- Where the offset is not likely to be viable or sustainable eg where the background rates of biodiversity loss are so great that the integrity of the offset is unacceptably threatened.





What Offsets mean for Rio Tinto

- pursued once all possible efforts to avoid and minimise harm to biodiversity have been under taken.
- not acceptable when unique, 'un-tradable' values are at stake
- size and complexity will vary & must be comensurate with biodiversity loss
- where possible 'like for like' but not limited to 'like for like'
- stakeholder engagement critical in identification, development and implementation
- must fit within the context of sustainable development

QMM Case Study

Achieving Net Positive Impact at QMM, Madagascar SUMMARY of QMM NPI CALCULATION

SUMMARY					
Predicted Impact	Avoidance	Mitigation	Rehabilitation	Offsets	Additional Conservation Actions
Littoral forest loss Mandena	Creation Conservation Zones included into SAPM Mandena = 230ha	<ul style="list-style-type: none"> Species rescue, programme. (transplantation) Top soil recycling Alien species control 	<ul style="list-style-type: none"> 10% = ecological restoration: littoral forest. Seed conservation and propagation RBG/Kew 	Tsitongambarika conservation zone Lowland forest (TGK I & III) (Birdlife, MBG, CI)	<ul style="list-style-type: none"> Capacity building of COGE and CIREEF Field guide for the Littoral forest (Kew/MBG). Management of forest resources through COGE and Dinas
Species loss <i>Phelsuma</i> <i>Antanosy</i> St Luce	Creation of Conservation zones (S9 S17)	Species rescue & translocation	<ul style="list-style-type: none"> 25% = ecological restoration: littoral forest. 	Ambatotsirongorongo conservation zone included into SAPM (Usaid, WCS, Fafafi)	<ul style="list-style-type: none"> Environmental education programme at St Luce focusing on species importance.

Key Issues in Moving Forward?

Many issues still need to be investigated as part of the continued development of the biodiversity offset models.

These include:

- Like for Like Offsets
- Global Vs Local Values
- Local Vs Regional Offset Solutions
- Measuring Impact and outcome in a meaningful and applicable way
- Sustainability of Offsets Solutions

Summary

- Biodiversity is both a risk and an opportunity to Mining and Other sectors
- Biodiversity Offsetting is one action in a hierarchy of biodiversity management actions
- A number of tools are available and being developed to assist operations in working towards the NPI or no net loss goals
- Collaboration with external stakeholders will be critical to achieving the goal
- Accounting and verification are critical factors in making this work.