

Biodiversity offsets: good for business and biodiversity?

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**Presentation to IPIECA Biodiversity Working Group
1 June 2005**

■ Context

- Why is a mainstream fund manager interested in biodiversity?
- The business case for managing biodiversity risk and opportunity
- The biodiversity benchmark

■ Biodiversity offsets: what and why?

- Definition and precedent
- Business and conservation opportunities and risks
- What's needed?

■ Forest Trends' Biodiversity Offsets Programme

■ Closing messages

Business and biodiversity: an investor's perspective

Why is a mainstream investor interested?

- Insight is the asset manager for Halifax Bank Of Scotland (HBOS).
- Approx £79.2 bn under management as at 31/3/05.
300 pension funds and several million HBOS retail investors.
- Policy on corporate governance and responsibility applied to all assets.
- We engage with companies to encourage them to adopt high standards on social, environmental and ethical issues.
- Select issues that pose business risks and opportunities. The aim is to protect shareholder value.
- Biodiversity is one such issue.
- We also work with Insight's analysts and fund managers to contribute to investment analysis and portfolio creation.

Extractives & biodiversity: the business case

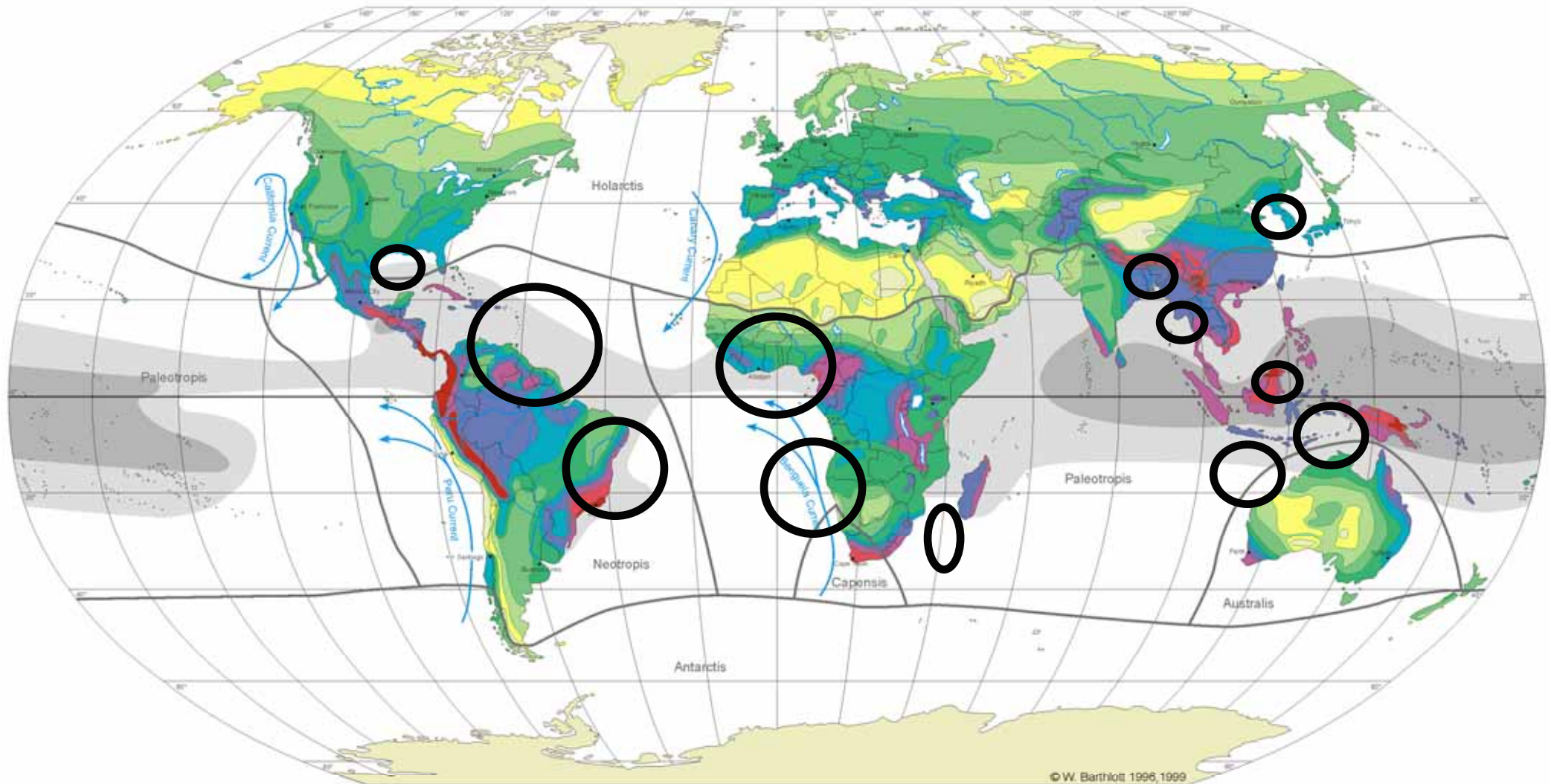
Biodiversity poses a risk and opportunity for oil & gas, mining & minerals and utilities companies :

- Companies may face difficulties in the medium- to long-term in accessing resources in new sites, suffering competitive disadvantage relative to others with better practice.
- They may also lose revenues through incurring liabilities, damage to reputation and increased operating costs in the short term.
- Conversely, best practice management of impacts on biodiversity can offer benefits such as speed of obtaining consents and licenses or favoured partner status, increasing shareholder value.

Trends suggest license to operate is critical

- Access to land & sea vital
- Overlap between biodiversity and future extraction
- Move to wilderness
(accessible reserves exploited since Industrial Revolution and before)
- Non-OECD
- Marine
- More control over access
- Public concern:
new “social contract”
- Access to assets is key performance driver (Goldman Sachs, 2004)
- Typical mine/reserve life \approx 25yrs
- Unprecedented replacement rates & productivity of mature reserves declining 5-10% p.a. (GS, 2003)
- Non-OECD countries: 70% of reserves & production for 120 oil & gas projects cf 21% in 1970. (GS, 2003). 78% of Top 100 reserves (GS, 2005)
- Highest biodiversity largely in tropical, developing countries.
- WRI: $\frac{3}{4}$ of active mines and exploratory sites overlap with areas of high conservation value.
- 67% the oil and gas industry’s 50 most important new projects are marine (GS, 2003)
- More Protected Areas: up from 60,000 in 2000 to 102,500 in 2003. New focus on marine.

GLOBAL BIODIVERSITY: SPECIES NUMBERS OF VASCULAR PLANTS



Overlay of some top O&G projects (KtK, based on Goldman Sachs, 2005) on Prof Barthlott vascular plant diversity map

Diversity Zones (DZ): Number of species per 10 000km²



Capensis floristic regions

sea surface temperature



W. Barthlott, N. Biedinger, G. Braun, F. Feig, G. Kier, W. Lauer & J. Mutke 1999
modified after
W. Barthlott, W. Lauer & A. Placke 1996
Department of Botany and Geography
University of Bonn
German Aerospace Research Establishment, Cologne
Cartography: M. Gref
Department of Geography University of Bonn

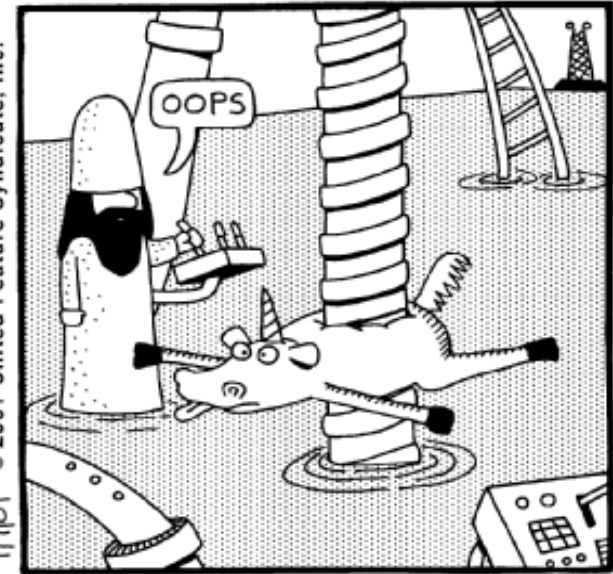
Is there an issue?



www.dilbert.com scottadams@aol.com



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Biodiversity benchmark



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Scored 22 extractive and utility companies' management of biodiversity on 27 issues under:

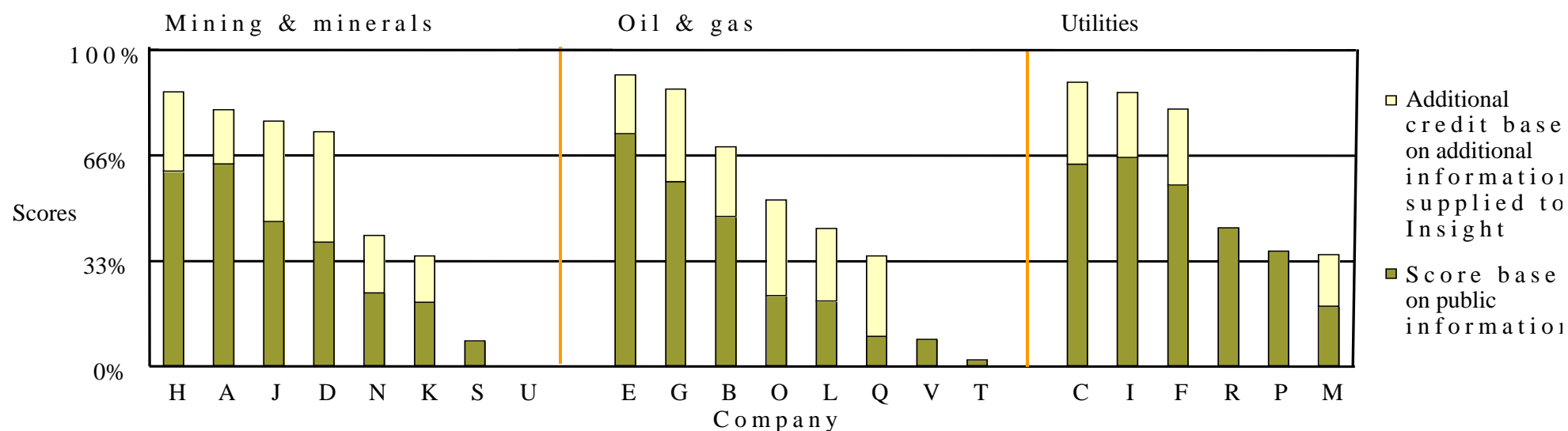
- Governance structures
- Policy and strategy
- Management and implementation
- Assurance and reporting

Table 1	Description	Mining and Minerals	Oil and Gas	Utilities
Engaged and actively managing	<ul style="list-style-type: none"> Biodiversity is acknowledged as a potential business risk and opportunity Biodiversity risk has been formally assessed Specific related policy commitments and management tools in place 	Anglo American BHP Billiton Rio Tinto RMC	BG Group BP Shell	Northumbrian Water + Severn Trent United Utilities
Aware and mobilising	<ul style="list-style-type: none"> Awareness demonstrated through acknowledgement of company's impact on biodiversity, its inclusion within certain aspects of risk management and/or passing reference within policy documents No explicit supporting biodiversity strategy or guidance for staff. 	Lonmin+ Xstrata+	Cairn Energy* Premier Oil+ Venture*	Centrica Kelda+ National Grid Transco
Early stages	<ul style="list-style-type: none"> Little or no evidence that potential risks relating to biodiversity have been formally assessed No publicly expressed rationale provided for any conclusion that biodiversity is not a business risk No explicit policy or management stance on biodiversity 	Antofagasta+ Aquarius Platinum*	Soco* Tullov*	
Notes	* Companies with an annual turnover that is less than £100 million + Companies with an annual turnover between £100 million and £1,000 million (source Hoovers.com)			

Biodiversity benchmark scores



HBO5 plc



Biodiversity offsets: what and why?

Biodiversity offsets: lateral thinking

© Cartoonbank.com



"Never, ever, think outside the box."

Exploring biodiversity offsets



HBOS plc



HBOS plc

Biodiversity offsets:



Views, experience, and the business case

Kerry ten Kate, Josh Bishop and Ricardo Bayon
November 2004

Insight and IUCN: Biodiversity offsets Views, Experience and the Business Case



Based on:

- 37 semi-structured interviews with individuals from:
 - companies
 - government & IGOs
 - NGOs
 - academia
- Some 20 shorter discussions with other people
- Literature review

Report:

- Introduction
- What is a biodiversity offset?
- Why biodiversity offsets?
 - The conservation case
 - The regulatory case
 - The business case
- How to offset:
 - Technical issues
 - Stakeholder issues
- Conclusions

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

Why should business offset the harm it causes to biodiversity ?



■ Legal requirements:

- Law that mandates offset (US, EU, Brazil, Australia)
- Law that facilitates offset (EIA, planning law, concession agreements)

■ The business case for voluntary biodiversity offsets:

- License to operate, reputational risk, regulatory goodwill
- Access to capital, lower costs of compliance
- New market opportunities, competitive advantage
- Influence regulation
- Employee satisfaction and retention
- Better conservation outcomes

Why should business offset the harm it causes to biodiversity ?



- The ability to **undertake projects** that might not otherwise be possible
- **Better relationships** with local communities, government regulators, environmental groups and other important stakeholders
- An **enhanced reputation** and therefore “social license to operate”
- Increased “regulatory goodwill” which could lead to **faster permitting**
- Easier **access to capital** and associated competitive advantages
- A practical **tool for managing** social and environmental **risks** and liabilities
- The possibility of **influencing** emerging environmental regulation and **policy**
- Reduced **costs of compliance** with environmental regulations
- **“First mover” advantage** for innovative companies
- Strategic opportunities in the **new markets** and businesses that emerge as biodiversity offsets become more widespread

Opportunities and risks

Opportunities:

Conservation

- more & better conservation, mainstreaming mechanism, gives value to biodiversity

Business

- economically efficient means to secure license to operate & reputation; influence policy: market mechanism not regulation

Policy-makers

- involve private sector in achieving 2010 target; use market mechanism

Local communities

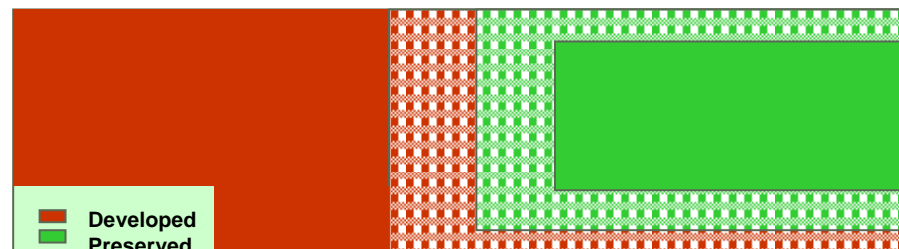
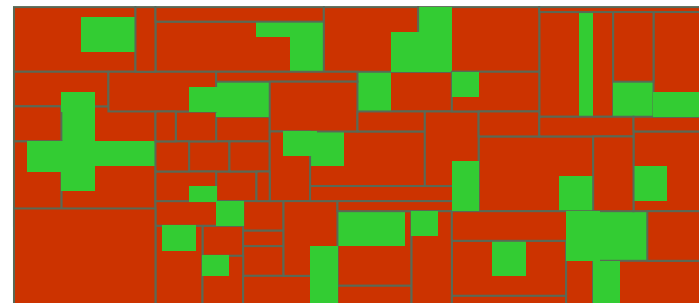
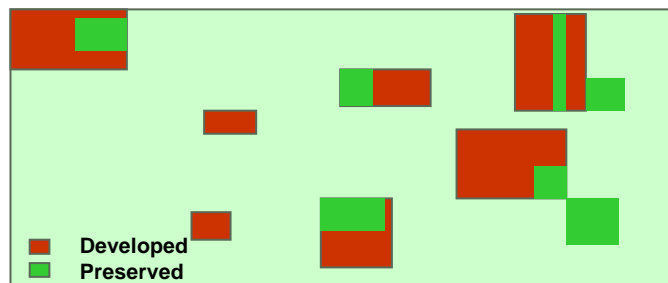
- means to minimise impact on livelihoods and secure additional benefits

Risks:

- No substitute for “no go” areas
- Failure to deliver
- Controversy
- Credible standards

More and better conservation

- Trade small compromised sites for larger areas with better prospects.
- Focus conservation efforts on priorities, in context of landscape/regional planning.
 - a representative sample of all biodiversity pattern (**representation**)
 - ecological processes (**persistence**)
 - Critical natural **capital values**



Sources: 2004: Insight/IUCN; White; Maze.

Experience with voluntary biodiversity offsets



■ Groups of companies:

- **EBI:** BP, Chevron Texaco, Shell, Statoil, CI, FFI, Smithsonian, IUCN, TNC
No net loss of biodiversity at project site. Should be minimum standard.
- **ICMM:** “an option for addressing impacts”: preparing a “White Paper”

■ Corporate policies:

- **Principles:** ‘no harm’; ‘no net loss’; ‘positive contribution’; ‘net benefit’; ‘enhance biodiversity’
- **BP:** Lord Browne, CEO: ‘We can have a real, measurable and positive impact on the biodiversity of the world.’ (April 2000)
- **Rio Tinto:** ‘net positive effect’

■ Company activities:

- **on-site:** EIA, mitigation, rehabilitation, restoration in concession contracts, host government & production supply agreements
- **off-site :** some specific biodiversity offset activities

What is needed?

- **Discuss**: Input from different disciplines and stakeholder groups to enrich the debate
 - More **dialogue** and shared vocabulary.
 - **Involvement of all stakeholder groups.**
- **Design**: Consultation to **develop methodologies and guidelines**
 - Workable, sound science methodologies with reasonable transaction costs.
- **Test**: **Pilot projects** to explore and identify best practice
 - demonstrate the approach in practice.

Forest Trends' Biodiversity Offset Programme



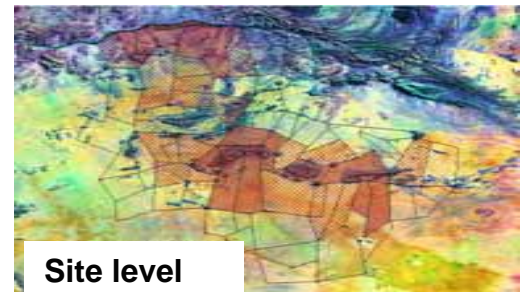
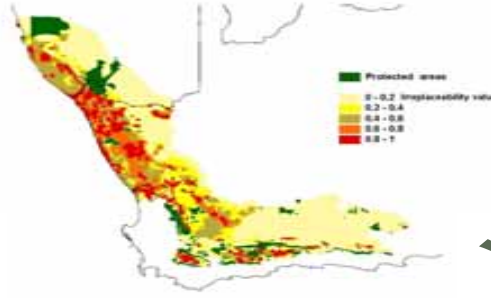
Biodiversity Offsets Program

Ensuring no net loss of biodiversity
in development projects
and prioritised *in situ* conservation

Global

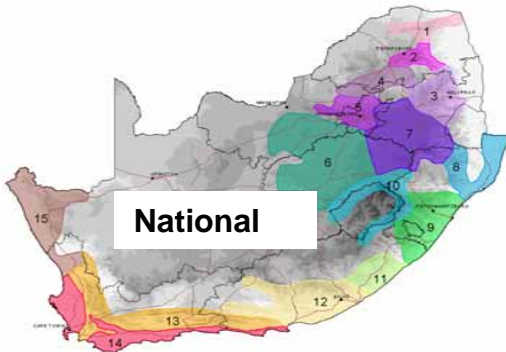


Bioregional



Site level

National



Biodiversity Offsets Program

Objectives:

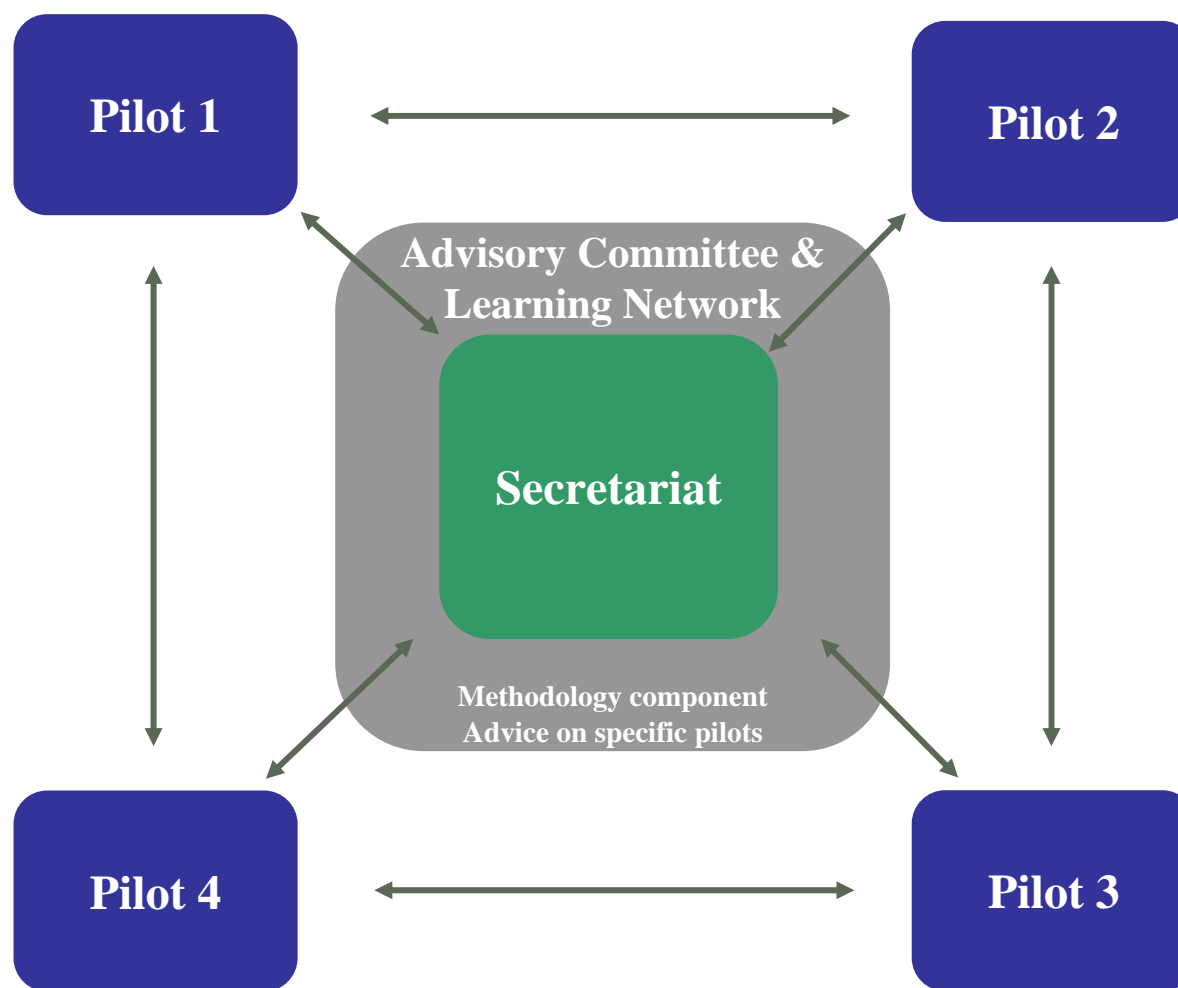
To **test and refine** a practical, cost-effective **model for biodiversity offsets** that secures license to operate, increases conservation outcomes and satisfies stakeholders.

- Design and implement biodiversity offset projects in different sectors and locations that achieve conservation, livelihood and business benefits
- To clarify the methodologies for measuring impact, prioritising offsets and involving stakeholders
- To stimulate debate and influence policy

Outcomes:

- Portfolio of successful pilot projects
- Toolkit
- Learning network
- Shared conclusions & lessons learned
- Policy and practice influenced

About the Biodiversity Offsets Program



Advisory Group & Learning Network

BNI



CI



FFI



FWS



Insight



INE



IUCN



SANBI



TNC



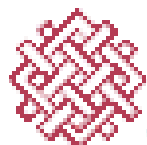
RBG, Kew



UNDP



WRI



WWF

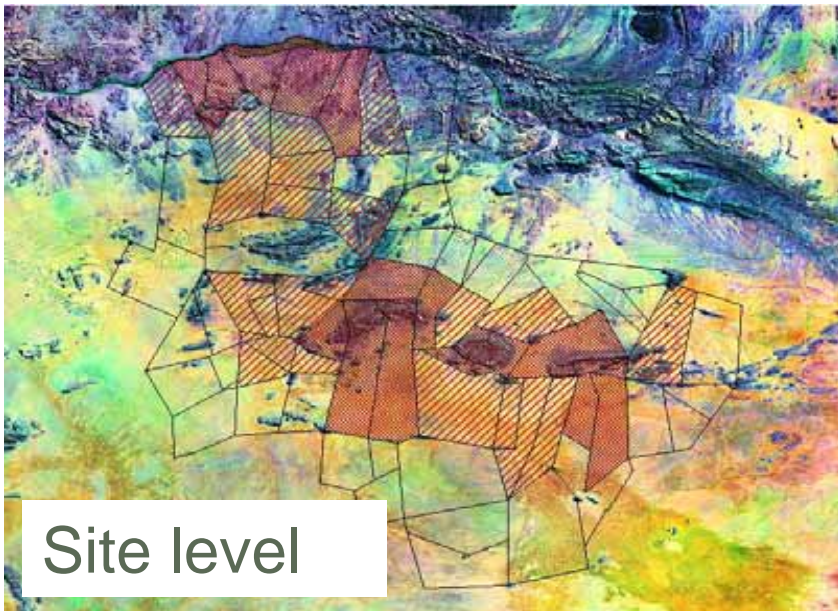
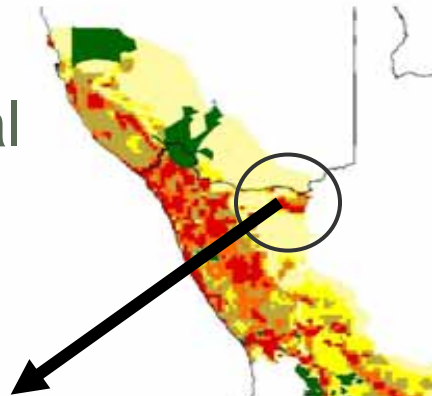


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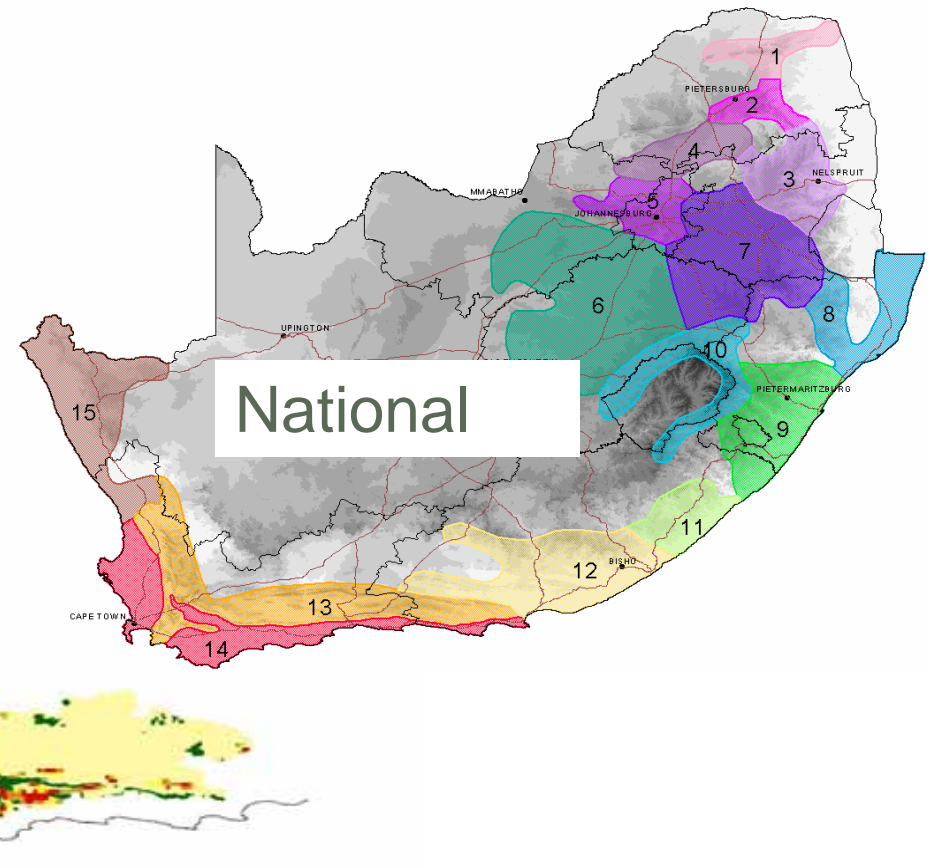


Planning at different scales

Bioregional

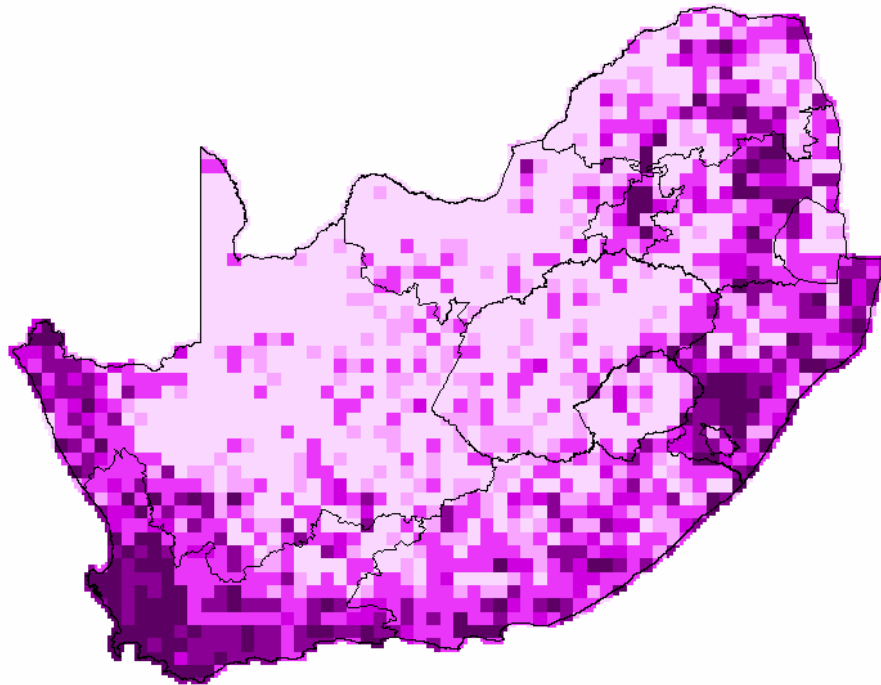


Site level

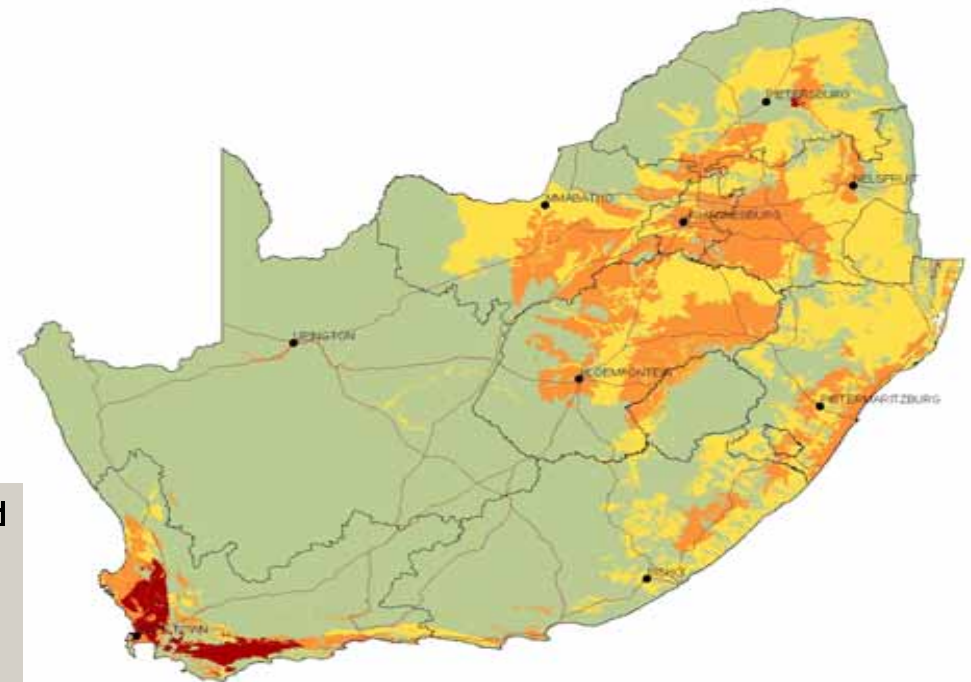
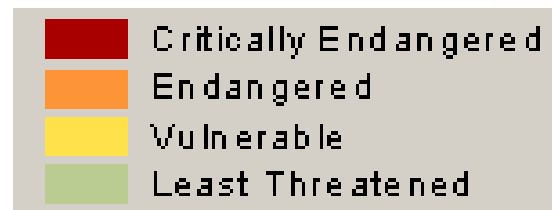


Source: Maze, 2004

Combined species analysis



Status of terrestrial ecosystems



Source: Maze, 2004

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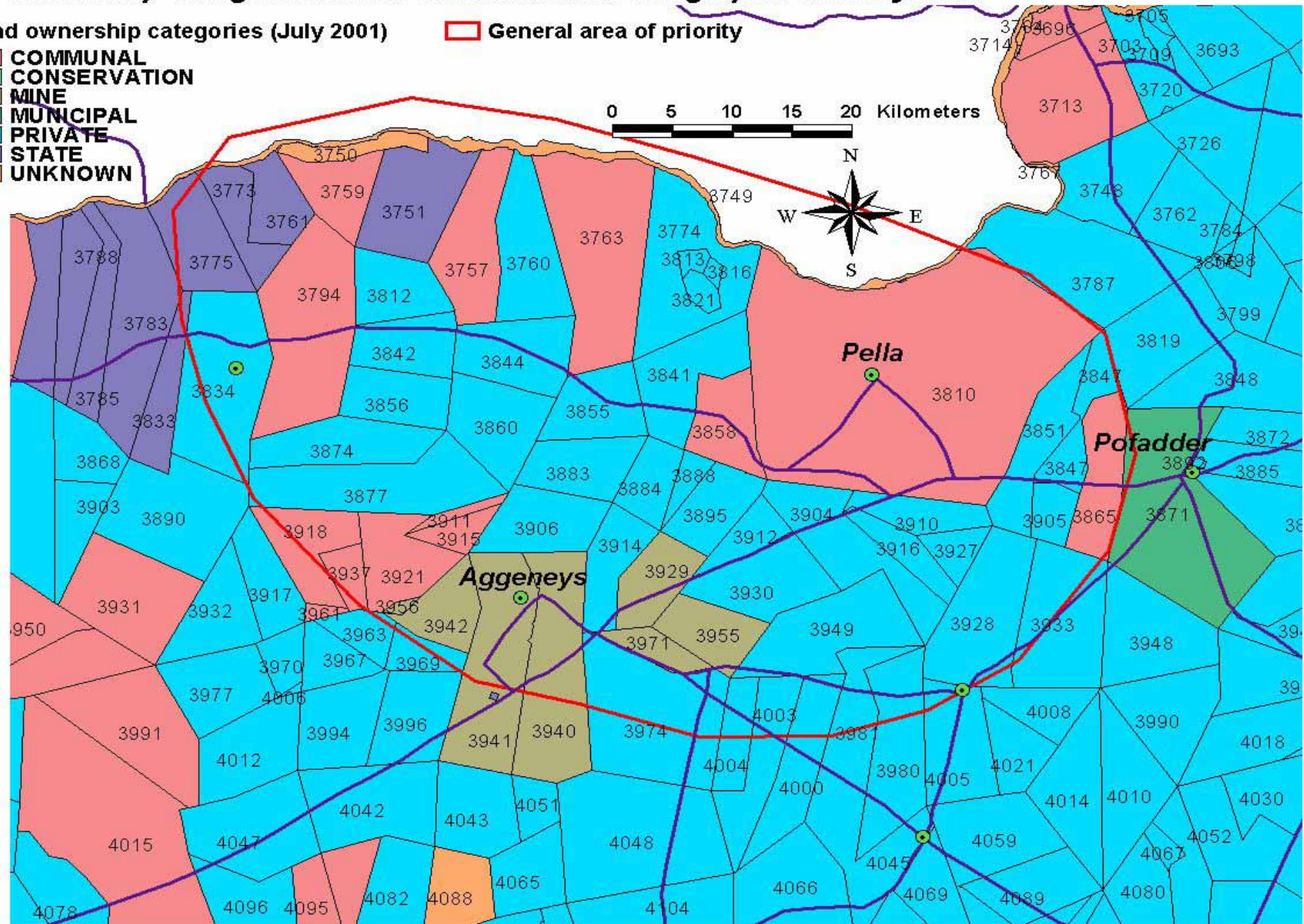
Source: Maze, 2004

Ownership categories in the Bushmanland Geographic Priority Area

Land ownership categories (July 2001)

- COMMUNAL
- CONSERVATION
- MINE
- MUNICIPAL
- PRIVATE
- STATE
- UNKNOWN

General area of priority



Source: Maze, 2004

What is a pilot project?

- **Specific projects in the field** (eg offshore gas rig, mine extension)
- **Objective:** demonstrate no net loss (or net gain) of biodiversity
- **How?**
 - Work with the company/developer, its stakeholders and experts
 - Calculate the biodiversity impact of the project.
 - Design and support implementation of a biodiversity offset - *in situ* conservation project.

A portfolio of pilot projects

Diversity of projects. Different:

- sectors (oil & gas; mining; tourism; construction; **agriculture**)
- scales (\$bn/100s of ha to \$100k/10s of ha)
- policy environments (mandatory to voluntary)
- ecosystems (tropical forest, desert, marine)
- countries (Middle East, Mexico, Ghana, Uganda, **Brazil, Australia, South Africa**)
- stakeholders & experts (companies, local & central govt, local & intl NGOs, local communities)

A growing, diverse portfolio

- **More pilots:** Over time, we anticipate adding more pilot projects. (Probably in phases, so different pilots can collaborate.)
- **Supply chain:** In Phase II we plan to include some “supply chain footprint” offset pilot projects.
- **“Footprint neutral”:** This programme on will contribute to UNDP’s “footprint neutral” work that aims eventually to promote developments that are carbon- and water- neutral and contribute to Millennium Development Goals.

Methodology Component

- **Objective: Toolkit for practitioners**
- Collate, analyse, synthesise methodologies for:
 - **quantifying impact**
 - **designing offsets**
 - **prioritising conservation**
- > 40 assessment methodologies for “no net loss” wetlands and conservation banking in the US.
- Victoria Net Gain policy & Habitat Hectares
- New South Wales “Green offsets” and principles; NSW “no net loss” fisheries policy.
- Western Australia Position Statement on Environmental Offsets
- Southern Australia “set-aside” formula and “Point Scoring System”.
- Brazil: National System of Conservation Units

Vision for the Program



All future major development projects (in the private and public sectors alike) - and certainly those which will have a significant impact on biodiversity - should ensure that they bring about no net loss (and preferably a net gain) in biodiversity.

Insight's conclusions

- **Biodiversity** presents a **significant risk** and **opportunity to business** in several sectors.
- A new “**social contract**” is emerging: **access to land and sea conditional on best biodiversity practice**.
- **Best practice** will come to mean “**no net loss**”, as a minimum.
- There is a **business case for companies to:**
 - **specifically offset the unavoidable harm they cause to biodiversity for new projects in areas of high biodiversity value**
 - **contribute to conservation activities to demonstrate a positive contribution at the group level**

SPARE MATERIALS

The business case for offsets



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- **License to operate:** Access to sites; good relations with communities and regulators; “favoured partner” status; “social contract”; influencing policy.
- **Effectiveness:** Maximise biodiversity value - priority conservation areas
Bang for buck; good PR; motivation for company and employees.
- **Flexibility:** Change location, scale of rehabilitation
Third party implementation; trade.
- **Efficiency:** Practical tool for managing risks and liabilities;
pick most cost-effective option; reduced costs of compliance.
- **Markets:** New markets and emerging businesses; first mover advantage.

Potential benefits for governments and communities



Government:

- companies make increased contributions to conservation, without necessarily requiring elaborate new rules;
- development projects planned in the context of sustainable development; and
- better balancing of the costs and benefits of conservation and economic development.

Communities:

- ensure developers leave a legacy of rehabilitated project sites and additional conservation benefits in the surrounding area;
- negotiate optimal environmental, economic and social outcomes at a community or landscape scale; and
- identify pre-project biodiversity and ecosystem benefits and ensure important ecosystems remain functioning and productive during and after development projects.

Key Insight/IUCN findings about biodiversity offsets



- **Turning point:** Growing interest and experience, but little guidance and many unanswered questions. *“Transcending trade-offs.”*
- **No go:** Only relevant where development is appropriate and they should always take place as part of the environmental mitigation hierarchy.
- **Mandatory or voluntary:** Can work in a range of policy settings, each of which have advantages and disadvantages that should be taken into consideration
- **Flexibility:** Case-by-case responses are a pre-requisite. But there are probably some common principles.
- **Conservation priorities:** Clear priorities are needed for offset design.
- **Further work** is needed.

Key Insight/IUCN findings

Basic principles



- Measuring “no net loss” is a challenge but not an insuperable barrier
- Ecological equivalence and conservation priorities need to be balanced
- Local benefits and conservation priorities need to be balanced
- Offsets should demonstrate real *in situ* conservation outcomes
- Design depends on agreement by stakeholders

Biodiversity offsets within the broader management context



- License to operate and reputational issues, linked to biodiversity performance, are material for business in several sectors.
- A new “social contract” is emerging. Society says to companies:

“We consume your products, but the world also needs to conserve biodiversity. You can continue to access land and sea only if you demonstrate best practice in managing your impact on biodiversity.”

- Best practice is likely to come to mean “no net loss” as a minimum, or “net gain”. Biodiversity offsets are one means of demonstrating this.

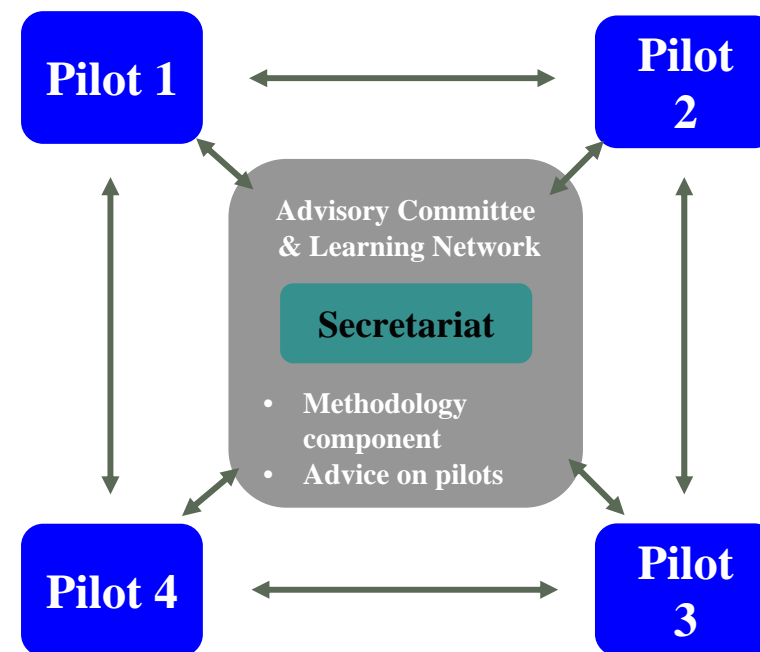
Forest Trends' Biodiversity Offsets Program

Pilot projects:

- **Specific projects:** (eg offshore gas rig, mine extension)
- **Objective:** demonstrate no net loss (or net gain) of biodiversity and stakeholder satisfaction
- **Partnership:** companies, communities, government authorities, experts
- **Diverse portfolio:** Sectors, scales, policy environments, ecosystems, countries, stakeholders & experts

Methodology component:

- **Toolkit** for practitioners: collate, analyse, synthesise methodologies for:
 - quantifying impact
 - designing offsets
 - prioritising conservation



Learning Network:

- Companies, NGOs, policy-makers and experts sharing ideas and experience