

From Compliance to Net Positive: Stakeholder Engagement for a Biodiversity Action Plan in the Brazilian Amazon



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Scope & Context

Putting Nature Positive action into practice on the ground

Who

- Operational copper mine in Brazilian Amazon

Why

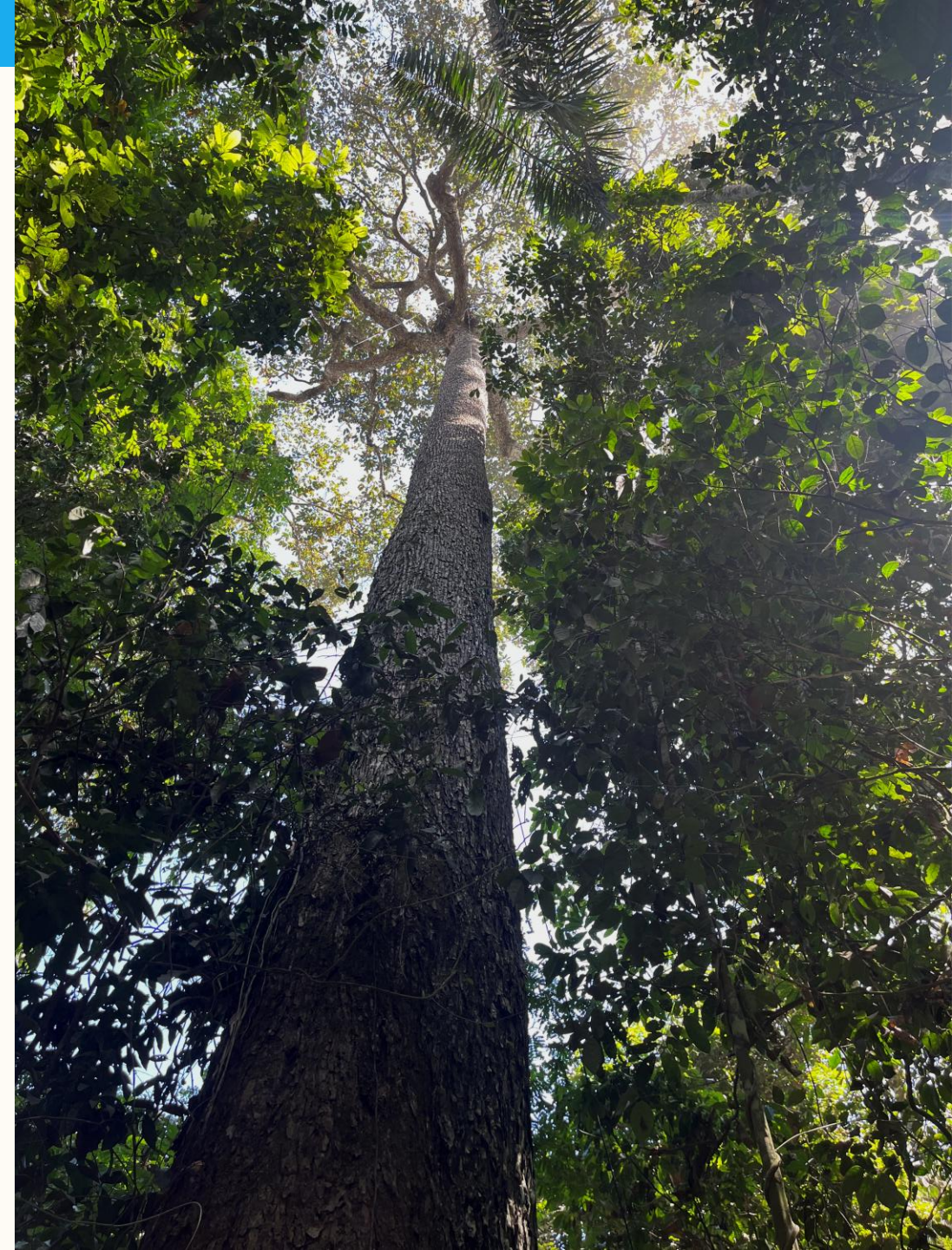
- Site-level strategy to meet No Net Loss (NNL) / Net Gain (NG)
- Multinational mining corporation with nature strategy
- TNFD assessment led to prioritization of high-risk sites for Biodiversity Action Plans (BAP)

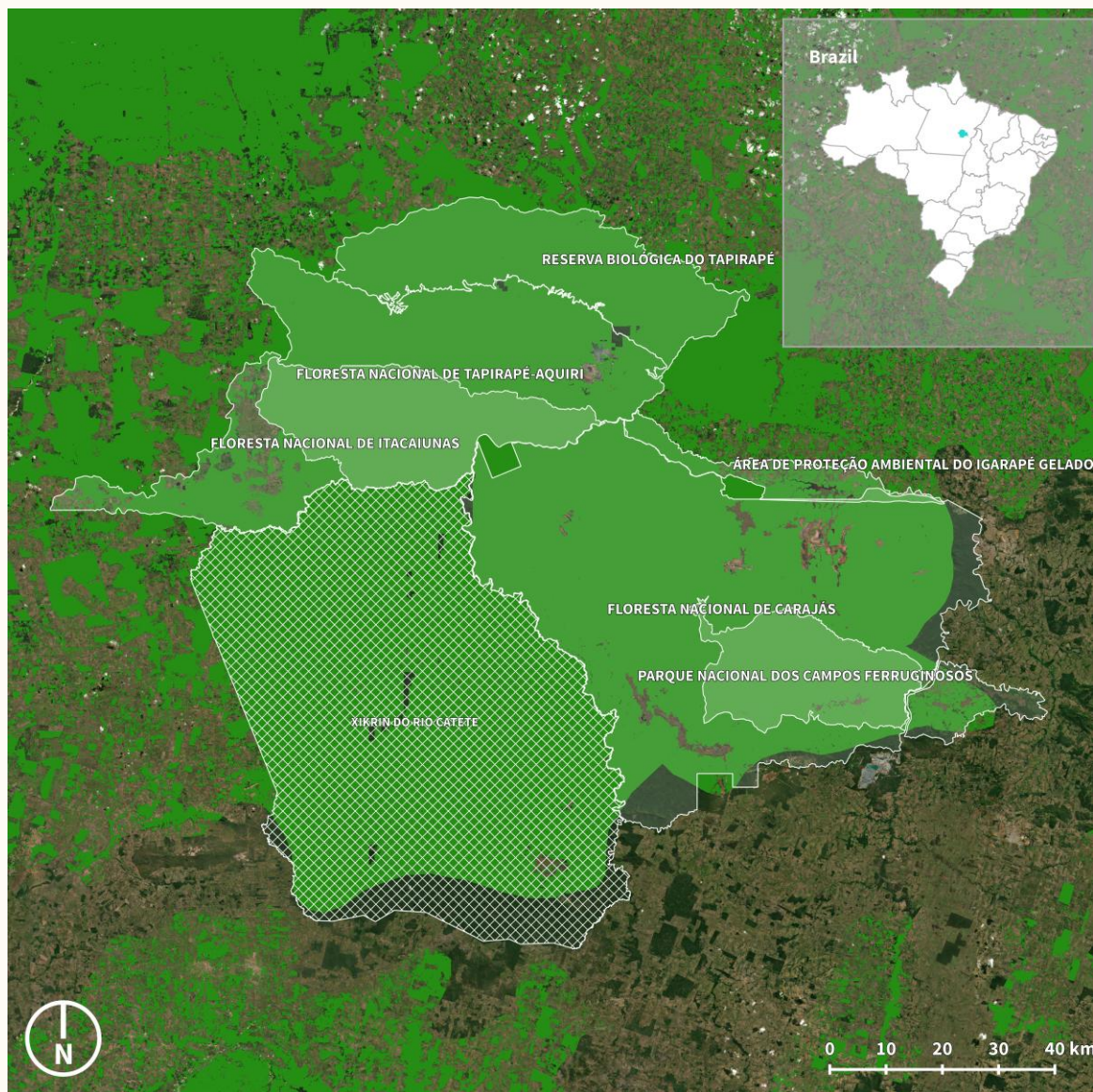
Historical impacts

- Permitting from late 1980s.
- First installation began in 2006
- Two mine expansion phases

Challenge & Opportunity

Navigating the **shift** from standard regulatory compliance to international best practice by **actively engage internal operations, external regulators, and local communities**.





Geographic Context

- Brazilian Amazon, Pará state — Serra dos Carajás
- Xingu-Tocantins-Araguaia moist-forest ecoregion
- Carajas forest mosaic made up of protected areas and Indigenous Territory
- Copper mine sits legally within a sustainable-use national forest
- within a large, fragmenting landscape — highly species-diverse
- Supports unique & threatened species and ecosystems

Pressures and Threats in the landscape

- Amazon Frontier - "Arc of Deforestation"
- Habitat loss driven by cattle ranching, timber and expanding agriculture
- Cumulative mining pressure – Large scale and artisanal and small scale mining
- Fire risk increasing with forest loss and climate stress

Critical Habitat under IFC PS6: 23 trigger species + 4 areas of ecological significance

Developing a BAP Stakeholder & Rightsholders Engagement Strategy

Phased engagement action plan

Phase 1:

BAP Scoping & Design

- ✓ **Establish Governance:** BAP Advisory Committee
- ✓ **Technical Biodiversity Workshops:** Define baseline/scope with internal specialists & NGOs.
- ✓ **Integrate Local & Traditional Ecological Knowledge:** Studies, interviews, workshops with communities and Indigenous Community to map culturally significant areas
- ✓ **Legal Compliance:** Integrate regulatory and ESIA conditions, and Protected Area designations

Key point– interest of affected communities in engaging in BAP actions

Phase 2:

Consultation

- ✓ **Internal Review:** Advisory Committee review for operation and company buy-in
- ✓ **External Technical Review:** Consultation with government - IBAMA & ICMBio.
- ✓ **Public Consultation:** Town hall meetings, online communications, and other consultation forms with formal comment period
- ✓ Engage and consult with **local conservation actors and initiatives**

Phase 3:

Finalization

- ✓ **Feedback Consolidation:** Summarizing inputs and providing responses
- ✓ **Validation:** BAP Advisory Panel & Govt Authorities.
- ✓ **Launch:** Publicly communicate implementation; provide feedback summaries to stakeholders.

Phase 4:

Implement & Monitor

- ✓ **Internal Rollout:** Toolbox talks; integrate into mine controls.
- ✓ **Collaborative Monitoring:** Annual Advisory reviews.
- ✓ **Participatory Monitoring** to further foster biodiversity stewardship
- ✓ **Reporting:** Annual BAP performance report (accessible language).

STAGE 1
Diagnose

STAGE 2
Operationalise

STAGE 3 · APEX
Strategise

STAGE 4
Prioritise

STAGE 5
Schedule

STAGE 6
Verify

STAGE 7
Engage (cross-cutting)

COMPANY-WIDE TOOL ·
Gap Analysis

STARTING POINT · ONGOING AUDIT

24-question site self-assessment against IFC PS6, Copper Mark RRA & ICMM Performance Expectations.
Used at scoping to identify gaps · Used throughout delivery to audit progress against best practice.

FOUNDATIONAL EVIDENCE & OPERATIONS

DIAGNOSE

Critical Habitat Assessment

Identifies trigger species, ecosystems & the EAAA against IFC PS6 criteria.

AUDIENCE

IFC PS6 reviewers · Lenders · Copper Mark auditors · Independent auditors

EVIDENCE ·>NNL/NG TRACKING

Biodiversity Ledger

species, habitat & ecosystem accounting

Tracks current impacts AND future positive outcomes — for long-term NNL/NG monitoring.

OPERATIONALISE

Biodiversity Management Plan

Site-team operational manual — mitigation hierarchy in daily protocols.

AUDIENCE

Site environmental team · Contractors · IBAMA · ICMBio · Auditors

ACCOUNTABILITY

Impact Matrix

Activity → receptor → mitigation → KPI → named owner.

STRATEGISE

Biodiversity Action Plan

- Sets No Net Loss & Net Gain targets
- Beyond-compliance framing · Four strategic pillars
- Coordinates landscape, species & community actions

AUDIENCE

Mine management · VBM corporate · Investors · Lenders

PRIORITISE

BAP Priority Actions

Action register: cost · timeline · feasibility · status · NNL/NG link.

SCHEDULE

5-Year Prioritization

Quarterly Gantt — what gets delivered when, across 6 years.

VERIFY

Monitoring & Evaluation Plan

Empirical evidence loop, KPIs & adaptive management.

ENGAGE & CONSULT

Stakeholder Engagement Strategy

Audience: IBAMA · ICMBio · Xikrin (FPIC) · Local communities · NGOs

IALOGUE FEEDBACK

ADAPTIVE FEEDBACK

Brazilian legal compliance vs International best practice NNL/NG

Legal conditions

IBAMA / ICMBio compensation

Brazilian Forest Code

- Mandatory compensation - restoration
- Permanent protected areas (APPs) – riparian zones and springs
- Legal reserves - 20% high impact, 80% preserved (Amazon biome)

Required conditions:

- Area restoration of degraded areas and APPs
- Species-specific replanting ratios – *i.e.* Brazil Nut Tree (*Bertholletia excelsa*)
- Financial compensation to impacted conservation unit (FLONA)

International standards expected

IFC PS6 · ICMM · Copper Mark

- Quality-hectare equivalence (not just area)
- Net Gain for Critical Habitat
- Cumulative & indirect impact accounting
- Fauna & flora species-level evidence of recovery
- Independent verification & disclosure

Structural gap — not a delivery failure. Forest removal permits require species-planting ratios and area; international standards apply ecological equivalence and species-level outcomes.

Bridging the gap to global biodiversity standards

Mine sits inside Critical Habitat under IFC PS6.

- Spatial mapping of habitat losses of a pristine rainforest over time reveals large deficit in area-based losses compared to legal compensation
- Brazilian regulatory compliance (IBAMA) is being met, but it does not equate to international NNL/NG.
- The gap is material and visible.
- High risk for business continuity

This BAP is KEY instrument for closing that gap.

THE RESIDUAL IMPACT GAP

~5,000 ha

Comprehensive footprint impact quantified



~700 ha

legal compensation completed to date



>4,000 ha

residual deficit to close



Source: CHA & BAP residual impact accounting

BAP Strategy Overview: Offsets to ACAs

Actions to establish NNL towards NG

Offsets: Residual impact deficit (NNL)

Existing Legal Compensation

- IBAMA-mandated species-ratio replanting,
- APP offsets,
- restoration forest offsets, and
- financial compensation.

Xingu-Tocantins-Araguaia Forest Offset Program

- Averted-loss reserves (RPPN),
- Forest restoration

Integrated Watershed & Riparian Offset

- Watershed health assessment,
- Riparian restoration
- Community-led riparian restoration.

Actions that contribute to Net Gain and Nature Positive outcomes

ACAs: Enabling Net Gain & Nature Positive activities (NOT offsets)

Regional Landscape Conservation

- Bacaja Carajas socio-biodiversity corridor support
- Fire prevention & firefighting program
- Landscape threat diagnostic — deforestation, degradation & fire
- ASM monitoring & mitigation

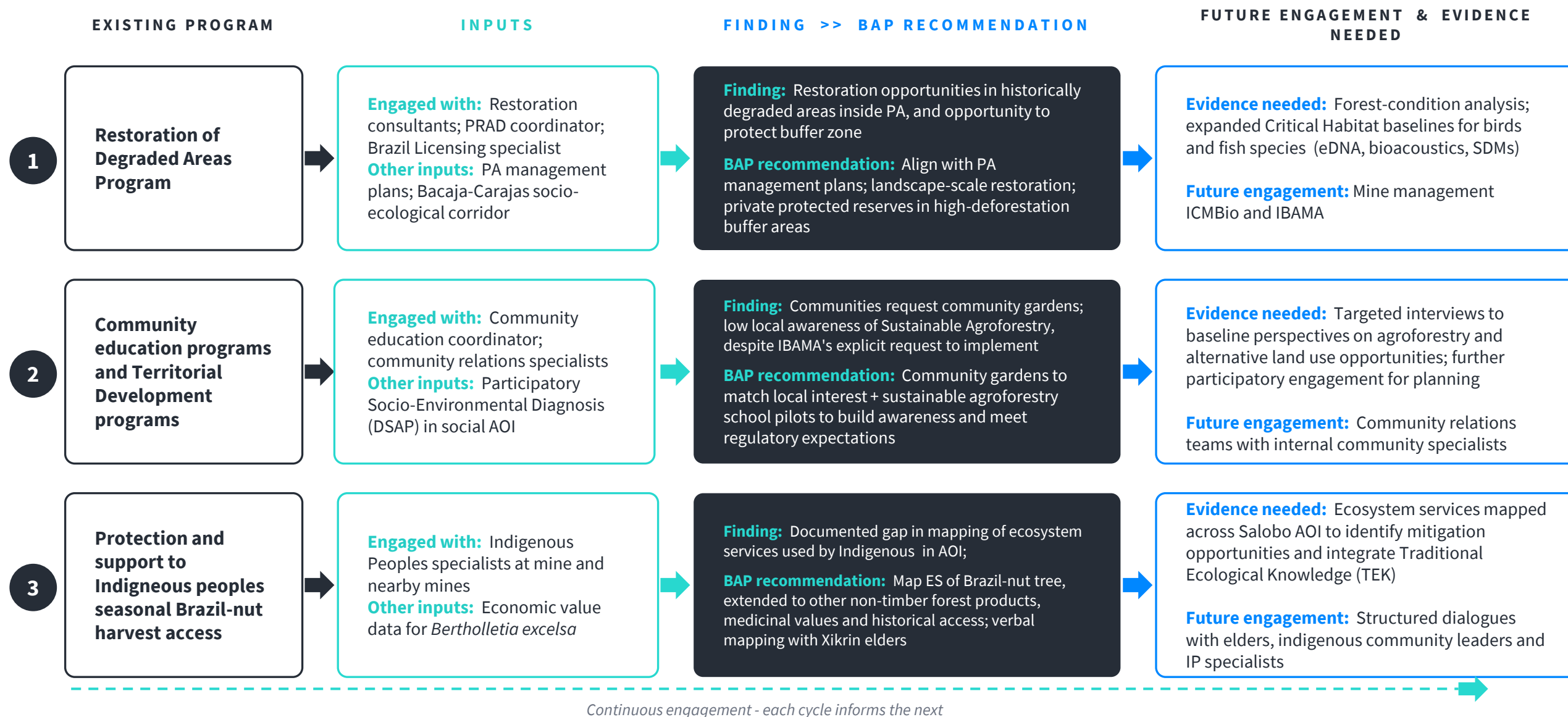
Community Stewardship & Ecosystem Services

- Environmental education program and workshops
- Community gardens & sustainable agroforestry pilots (SAF)
- Indigenous mapping of ecosystem-service values

Research & Monitoring

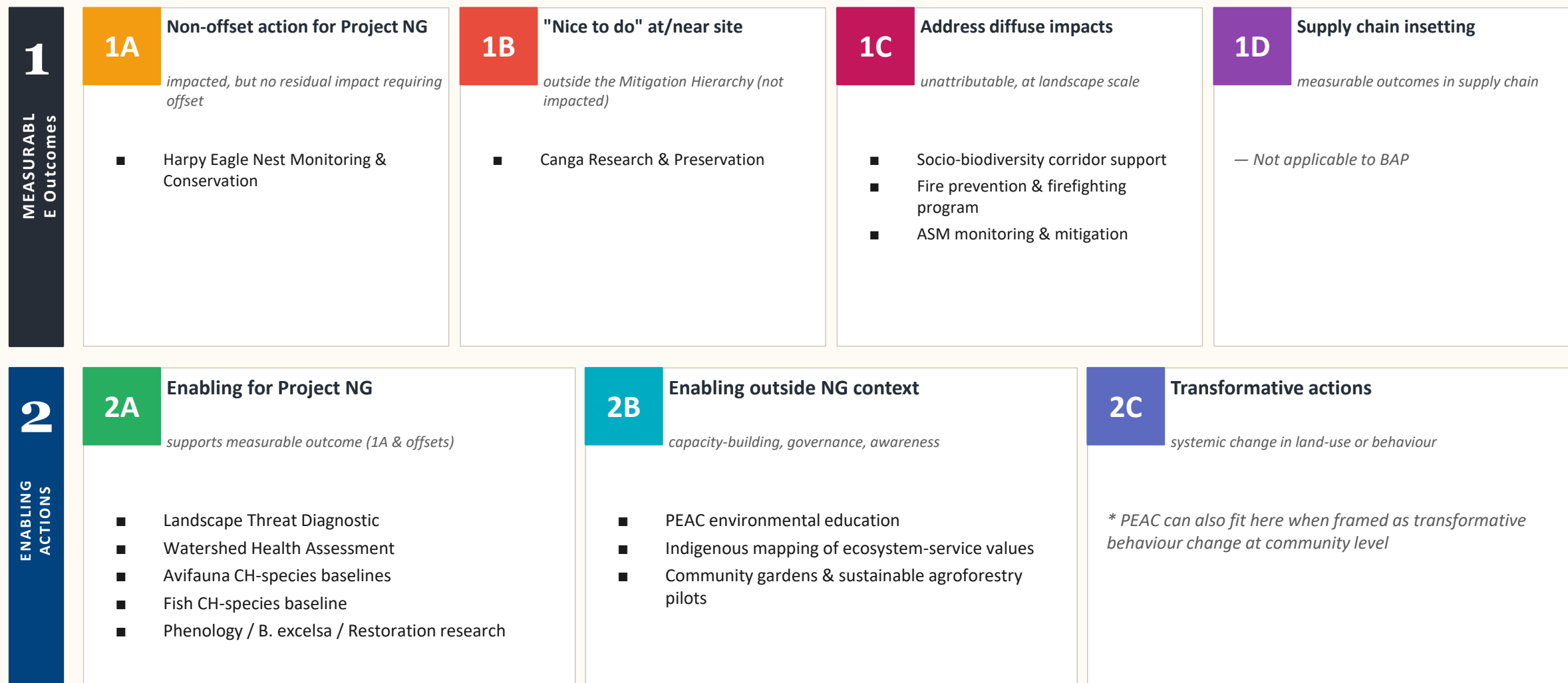
- Avifauna and Ichthyofauna monitoring (CH-trigger species)
- Harpy Eagle nest monitoring & conservation
- Canga research & preservation
- Phenology of threatened flora

Engagement streams: from existing programs to BAP-aligned outcomes



ACAs typology - mapped

Each ACA placed in one of seven typologies. Tier 1 = produce measurable state-of-nature outcomes. Tier 2 = enabling actions where outcomes are not readily measurable.



Concluding thoughts and takeaways...

A successful Biodiversity action plan requires...

- An evolving, adaptive framework
- Clear and continuous engagement to drive impact
- Highly technical documents and evidence yet require concise impactful messaging
- Justification through quantified and qualitative evidence
- Engagement to build trust & identify site champions
- Clear communication of priorities for long term buy in

Evolving and adaptive process necessary for long term successful conservation



Let's continue the conversation!

Message me your questions or comments in the IAIA26 app.

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