External Review of Phase II of the IUCN-Holcim Agreement

Final Report

Prepared for: IUCN
By Alain Frechette, Independent Consultant
December 2013

Preface

This report presents the results of the independent Review of Phase II of the IUCN-Holcim Agreement. Following two months of data collection in the summer of 2013, the report was written in September and iteratively revised over a two-month period in light of ongoing discussions between the reviewer, Holcim and IUCN. The report was produced by Dr. Alain Frechette, with technical research support provided by Ms. Melissa Rodrigue. The views and interpretations presented herein are those of the author only. Any remaining factual errors should likewise be attributed to the reviewer.

Fruitful completion of this assignment would have been impossible, were it not for the open and collaborative relationship that IUCN and Holcim have development over the years, and the willingness of all interviewed stakeholders to critically examine the benefits, successes and challenges of achieving the objectives of the Agreement. Special thanks to Maria Ana Borges of IUCN and Rashila Kerai of Holcim Ltd., for their unyielding support, and dedication to the ideals of a relationship that sets an important precedent for improving human-environment interactions in the sectors associated with mining and cement production.

Alain Frechette
Montreal, Canada
December 20th, 2013

Executive Summary

Introduction

In 2007, the International Union for Conservation of Nature (IUCN) signed an Agreement with Holcim Ltd., one of the world's leading suppliers of cement and aggregates. In 2011, the IUCN-Holcim Agreement was renewed for three more years. The overall purpose of Phase II was to effectively implement the Biodiversity Management System (BMS) and achieve biodiversity conservation and business outcomes, with the aim of influencing practices in the wider building materials sector. As the Agreement's second phase neared its end, IUCN commissioned Dr. Alain Frechette to conduct an external review in order to assess the results of the latest phase of its relationship to Holcim.

Purpose, Objectives and Scope of the Review

The review's overall purpose was to assess the results of the relationship, focusing on the challenges and opportunities of Phase II, in order to prepare lessons and recommendations to improve both organisations and foster discussion around future collaborations. The review covers all aspects of the programme Agreement since it was signed, in February 2011. It is intended to support the decision-making needs of the joint Steering Committee, the Relationship Managers for both partners, the IUCN Business and Biodiversity Programme, Water Programme and Environmental Law Centre.

Methodology

This report presents the results of an evaluative inquiry conducted between July 1 and August 30, 2013. Guided by the OECD-DAC evaluation criteria (i.e. relevance, effectiveness, efficiency, and sustainability), the review was carried out using a participatory and qualitative mixed-method approach involving expert interviews, document review, and site visits. Semi-structured interviews with key stakeholders, both face-to-face and on the phone, constituted the principle source of data, and documents were reviewed for relevance and to validate stakeholder input. Finally, to better understand the context of Holcim's operations, site visits helped probe deeper on issues facing site managers.

Data Analysis and Reporting

Sources of information were triangulated to ensure validity and to minimise the risk of spurious correlations. Descriptive, content and comparative analyses served to understand the programme and its evolving context, to highlight common and diverging trends, as well as to identify best practices, innovative approaches, and lessons learned. An outline of the Theory of Change underlying IUCN's BES was also produced to better understand its logic and situate results within broader private-sector goals.

Three main factors constituted limitations to the reporting process. First, Holcim has been working on the rollout and implementation of the BMS at all its sites, however, the level of implementation was difficult to assess given the available data. The reviewer also had limited opportunities to query Holcim personnel. Finally, while the assessment was initiated within the desired timeframe, some of the key relationship outputs were not yet finalised. These limitations made it more difficult to assess evaluation criteria, but measures were taken to mitigate or overcome each one.

A draft report was provided to IUCN in late September of 2013, and key conclusions and recommendations were presented to stakeholders in early October of 2013. Comments and insights were integrated in order to produce a final version of the review in late October of 2013.

Main Findings

Main Finding 1: **The Agreement is highly relevant to IUCN's mission/BES as well as Holcim's vision/interests. It sets important standards for the wider sector to emulate.**

While the Agreement supports efforts to engage sector leaders – including at the policy level – to improve biodiversity management, as well as broadens the scope of IUCN's commitment to the private sector, it also provides Holcim with the opportunity to improve relationships with different constituencies and reduce its transaction costs. This precedent-setting Agreement is relevant to the challenges faced by the wider sector, having fostered the development of knowledge products that can be applied to effect change.

Main Finding 2: **Phase II of the Agreement has demonstrated progress in terms of attaining outputs, but outcomes have yet to be achieved.**

While BMS implementation is progressing, concerns remain regarding the reliability of its tracking system, as well as the costs related to effecting change. A robust baseline assessment of water management was produced, and because this component is less abstract in nature, uptake is expected to be easier. Overall, the Agreement's agenda creates positive pull in the sector, as awareness and action around biodiversity have increased. Though policy guidelines help strengthen IUCN's value proposition and harmonise industry standards, the absence of a clear dissemination strategy could limit their usefulness.

Main Finding 3: **Holcim's efforts to improve biodiversity and water conservation are supported by a favourable environment and clear commitment. However, investments to strengthen capacity, achieve measurable change, and ensure compliance remain sub-optimal.**

Holcim's commitment to sustainability and valuation of biodiversity concerns provides confidence in its ability to deliver results over time, but its willingness to bear the costs of these efforts is less clear. For outcomes to be achieved, actions must be strategically planned and emphasis must be placed on capacity building and effective assurance mechanisms.

Main Finding 4: **The Agreement provides value-for-money, but a more inclusive, strategic and deliberative planning process would have generated greater efficiency.**

Though some challenges – such as changes in the policy component and difficulties in developing the water component – have increased anticipated transactional costs, both partners recognise that the Agreement has produced good value-for-money. By ensuring the inclusion of relevant stakeholders, lengthening the deliberation process, and expanding upon results achievement strategies, efficiency could have been greater.

Main Finding 5: **The Agreement faced a number of challenges in terms of making authoritative decisions, building operational capacity, and pursuing an ambitious conservation agenda in unfamiliar circumstances. Leveraging lessons will be crucial for guiding the way forward.**

In this regard, the role and authority of the Steering Committee is vital to ensure that influence is exerted in the appropriate forums. Likewise, continuous support is necessary to increase operational capacity, and the assumptions underlying the Agreement and IUCN's BES require further refinement in order to effectively guide actions and attain impacts.

Recommendations

Recommendation 1: **The programmatic intentions of Phase II of the IUCN-Holcim Agreement should be brought to a useful conclusion.**

IUCN and Holcim should (i) develop a working model of how and under what conditions the BMS and the Biodiversity Indicator Reporting System (BIRS) are likely to be integrated and acted upon; (ii) test the model and its assumptions in different settings/regions; and (iii) scale up interventions and monitor results.

Recommendation 2: With the technical backing of IUCN and members of the Biodiversity Panel, Holcim should strengthen the capacity of operational and management personnel, so they can better understand the meaning and value of biodiversity conservation, reliably measure relevant risks, as well as plan, implement, monitor and report on mitigation strategies.

More must be done to convey the importance of biodiversity across Group companies, to inform operators of the biodiversity directive, and to better communicate the changes that Holcim seeks to achieve. To this end, Holcim should work with IUCN to devise a robust capacity-building strategy that addresses the full range of learning needs within Group companies. Moreover, Holcim should consider the establishment of a help-desk function to provide on-going technical assistance to operational staff. To this end, partnering with IUCN should help reduce transaction costs, provide strong value-for-money and generate legitimacy.

Recommendation 3: **To ensure compliance and secure the legitimacy of its efforts, Holcim should consider strengthening its internal/external auditing process to fact-check the validity of self-reported data in periodic but non-specific cycles of two or three years.**

The BMS relies on self-reporting mechanisms that offer little assurance in terms of reliable analyses and accounts of risk factors. Without clear monitoring and enforcement measures, site operators will face strong incentives to minimise their efforts and downplay the biodiversity and water risks associated with their operations.

Recommendation 4: **IUCN and Holcim should jointly determine how they should best disseminate the knowledge products resulting from their partnership.**

The Agreement has developed several important knowledge products, including the Integrated Biodiversity Management System, the BIRS, the Water Management Framework, and the Policy Guidelines. The partners should determine how to leverage these investments so as to improve biodiversity conservation, both within the sector and across other large footprint industries.

Recommendation 5: **To achieve the intended impacts of the BMS, IUCN and Holcim should jointly consider how they could leverage sector-wide commitments towards conservation planning and ethics.**

IUCN could play a central convening role, as well as explain the limits of ecosystem and planetary boundaries, while Holcim could help establish industry-wide standards. The assumption that this approach would yield interest from a larger group of companies, as well as increased resources, buy-in and opportunities, remains to be tested.

Recommendation 6: The IUCN Secretariat should take time to reflect on recent experiences with the private sector to revisit its Business Engagement Strategy and the assumptions that support it.

Though IUCN's work with the private sector is supported a relatively clear set of results, the assumptions that underpin its ability to deliver such support appear questionable. As IUCN begins thinking of ways to further its relationships with the business community, it will need to define a more robust and consistent account of how it seeks to effect change, including the assumptions that underlie its approach and the operational model it uses to organise and deliver its work. Clarification of the role and contribution of all segments of the Union will be crucial.

Acronyms

BAP	Biodiversity Action Plan
BBP	Business and Biodiversity Programme
BES	Business Engagement Strategy
BIC	Biodiversity Indicator Category
BioPan	Biodiversity Advisory Panel
BIRS	Biodiversity Indicator Reporting System
BMS	Biodiversity Management System
CSEA	Committee on Social and Environmental Accountability
CSI	Cement Sustainability Initiative
ELC	Environmental Law Center
EPD	Environmental Product Declaration
FICEM	Federación Interamericana del Cemento
GIS	Geographic Information System
HGRS	Holcim Group Support
IBAT	Integrated Biodiversity Assessment Tool
IBMS	Integrated Biodiversity Management System
ICMM	International Council on Mining and Metals
IFC	International Finance Corporation
IIA	Institute of Internal Auditors
IUCN	International Union for Conservation of Nature
NGO	Non-Governmental Organisation
OECD-DAC	Organisation for Economic Cooperation and Development – Development Assistance Committee
ORM	Operational Risk Management
PEP	Plant Environmental Profile
SC	Steering Committee
ToC	Theory of Change
ToR	Terms of Reference
UEPG	Union Européenne des Producteurs de Granulats
WBCSD	World Business Council for Sustainable Development

Table of Contents

Exhibits

Appendices

1. Introduction

1.1 Background

In 2011, the International Union for Conservation of Nature (IUCN) renewed a three-year agreement with Holcim Ltd., one of the world's leading suppliers of cement and aggregates. As the agreement neared its end, IUCN requested that an external review be conducted to assess the results of the latest phase of its relationship to Holcim, with a view of developing lessons learned and recommendations that would inform the respective interest of both partners. In conformity with Article 12.4 of the IUCN-Holcim Agreement for Phase II, IUCN commissioned Dr. Alain Frechette to carry out this assessment. The present document constitutes the *final report* of the review of Phase II of the IUCN-Holcim Agreement.

The IUCN-Holcim Agreement was launched in 2007, following informal discussions between the then Chief Executive Officer of Holcim Ltd., Mr. Markus Akermann, and the ex-Director General of IUCN, Mr. Achim Steiner. Whereas the first phase of the relationship was exploratory in nature and sought to (i) assess Holcim's approach to biodiversity conservation; (ii) explore and develop joint initiatives; and (iii) promote good practice and the sharing of ideas with the sector, the second phase was decidedly more focused and specific in its intentions. The overall purpose and specific objectives of Phase II are detailed further in this report (see Section 2).

1.2 Purpose, Objectives and Scope of the Review

Conducted near the end of the current (second) phase but well within the timeframe of the Agreement, the review is intended to be both formative and summative. As defined in the Terms of Reference (ToR), the purpose of the review is "to evaluate the results and value of the relationship and programme" thus far and to "critically assess the challenges and opportunities encountered in Phase II of the IUCN-Holcim relationship," so as to "draw lessons and recommendations for improvements in each organization." In fulfilling the proposed mandate, it was anticipated that the review would likewise "trigger discussions" on the possibility, nature and scope of future collaborations.

Following the ToR, the objectives of the review are to:

1. Assess the extent to which the expected results of the Agreement have been fulfilled;
2. Identify lessons and provide IUCN with recommendations on how it could strengthen its Business Engagement Strategy, improve the development of future bilateral agreements with companies and engage broader constituencies at the sectoral level;
3. Identify lessons and provide Holcim with recommendations on how it could further support the implementation of biodiversity and water-related systems in its operations so as to (i) ensure the sustainability of Agreement results; (ii) achieve measurable impacts on biodiversity; and (iii) improve the uptake of the water risk framework.

In compliance with these objectives, the scope of the review includes all aspects of the programme Agreement, which were jointly developed by Holcim and IUCN for the second phase of the relationship. As such, the review focuses on the activities pursued under the IUCN-Holcim Agreement since it was signed in February 2011. Following a special request made by IUCN's senior management during the data collection phase, this review also provides a detailed outline of the evolution of IUCN's private sector engagement. The resulting analysis details the changes in modalities and approaches pursued by the Union since the 1990s. A similar exercise was conducted for Holcim. Together, these elements help

to frame the context (see Section 2) of this review, providing a firm basis for understanding the results of the present inquiry.

1.3 Audience

This review is intended to support the decision-making needs of the joint Steering Committee, the Relationship Managers for both partners, the IUCN Business and Biodiversity Programme, the Water Programme and the Environmental Law Centre, under the authority of the IUCN Director General and the Chief Executive Officer of Holcim. In support of these stakeholder groups, the review sought to develop lessons learned and make recommendations to each organisation, as appropriate.

1.4 Methodology

This report presents the results of an evaluative inquiry conducted between July 1 and August 30, 2013. To ensure the validity and reliability of the study findings, the review was carried out using a participatory and qualitative mixed-method approach involving expert interviews, site visits, and document review. The questions guiding the review, as well as the sources of data and preliminary performance indicators, were developed in accordance with standard OECD-DAC evaluation criteria (i.e. relevance, effectiveness, efficiency and sustainability) on the basis of the objectives and questions outlined in the Terms of Reference (see Appendix I). The resulting review matrix (see Appendix II) was then fielded in two subsequent rounds of discussion and feedback sessions with the Relationship Managers for IUCN and Holcim. Drawing on the matrix, a generic set of protocols was developed and jointly revised with the input of both organisations (see Appendix III). Overall, the review incorporated three distinct, though overlapping phases: (i) inception; (ii) data collection; and (iii) analysis and reporting. Each of these is summarised below.

1.4.1 Inception

The inception phase was used to ensure that the consultant, IUCN and Holcim had a common understanding of the review purpose, objectives, scope, approach, deliverables and timeline. Conducted in close collaboration with the IUCN Planning, Monitoring and Evaluation Unit and Business and Biodiversity Programme, as well as the Holcim Biodiversity Programme Manager, work planning involved four separate steps: (i) preliminary document review; (ii) the development of a draft Inception Report and evaluation matrix; (iii) consultations and refinement of the tools and approach; and (iv) integration of stakeholder feedback and finalisation of the Inception Report.

1.4.2 Data Collection

Review data was collected from three different sources: documents, informants, and site visits.

Document Review

Documented sources of evidence provided an important subset of data in this review. Identified with the assistance of IUCN and Holcim at the inception phase and during the field visit to the Swiss-based headquarters of both organisations, documents were reviewed for their relevance and analysed in the context of the key issues and questions highlighted in the review matrix. Documents were used to validate and complete stakeholder input, and played a key role in tracing the evolution of Holcim's environmental sustainability efforts and IUCN's engagement with the private sector.

Key Stakeholder Interviews

Interviews conducted with the key stakeholders to the IUCN-Holcim Agreement provided the principle source of data for this review. Using a semi-structured interview format, targeted questions were drawn from the generic protocols (see Appendix III) to address the role and responsibilities of each individual respondent, focusing only on those issues that were relevant to their experience and involvement. To this end, guidance from the IUCN Monitoring and Evaluation Unit and the IUCN-Holcim Relationship Managers proved essential. The bulk of the interviews were conducted face-to-face over a ten-day period, during which the consultant visited the respective headquarters of the two partners in Switzerland. Phone interviews were conducted with stakeholders stationed outside of Switzerland, as well as others who were not available during the consultant's visit. Finally, to protect the confidentiality of the ideas and opinions expressed by respondents, interview notes were aggregated to identify common trends as well as divergent views on the key issues of this review. Citations in the report are used to capture cogent ideas and perspectives, not the identity of the individuals who provided them.

Field Visits

As part of the data collection process and to better understand the contexts within which Holcim operates, the reviewer visited a ready-mix site in Drummondville, Québec (Canada), as well as a quarry in neighbouring Varennes. Site visits served to validate opinions expressed by stakeholders (from all sides) during the review and to probe deeper on issues facing operational site manager, such as the challenges and opportunities of implementing effective biodiversity conservation measures and improving water resource management.

1.4.3 Data Analysis and Reporting

Drawing on the multiple streams of evidence gathered during this assessment, the consultant triangulated the different sources of information to ensure the validity and credibility of the review and to minimise the risk of spurious correlations. Descriptive analysis was used to understand the programmatic components of the Agreement and the evolving context within which the relationship emerged. Content analysis was used to identify common trends, themes, and patterns for each of the key units of analysis, as well as to flag diverging views and opposite trends. Finally, comparative analysis was used to examine findings across stakeholder groups and to identify best practices, innovative approaches, and lessons learned. Preliminary findings and areas of recommendation were shared in advance with IUCN and Holcim to solicit feedback, validate observations, identify problem areas, and test the feasibility of emerging recommendations. In all, two cycles of comprehensive exchanges between the reviewer and the IUCN-Holcim agreement relationship managers and Steering Committee were used to develop a report that supported the information needs of its intended audience.

Last but not least, the reviewer also constructed a preliminary outline of the Theory of Change (ToC) that underlies IUCN's Business Engagement Strategy (BES). This process aimed at better understanding the proposed logic of IUCN's approach and at situating the review's results in the broader context of IUCN's goals related to working with the private sector. Thus, the reviewer gained clarity on the causal pathway and assumptions that support the level of change desired and how this links to the way IUCN organises to achieve its intended impact within the private sector.

1.4.4 Limitations

The review was hindered by three main factors. First, Holcim has been working on the rollout and implementation of the BMS at all its sites, however, the level of implementation was difficult to assess given the available data. As a mitigation measure, the review focuses analytical attention on stakeholder perceptions of progress, the successes and challenges operational managers face in trying to comply with the implementation directive, and the degree to which the underlying institutional conditions provide a favourable environment for scaling up results.

The second and related issue concerns the reviewer's limited opportunity to query Holcim personnel (e.g. environmental and site managers, operational staff) on their views, experiences and perceptions of the IUCN-Holcim Agreement and the relative performance of the BMS process. This made it more difficult to assess the challenges and opportunities for Holcim in terms of achieving the conservation outcomes envisioned in the Agreement. To offset this important caveat, Holcim accepted that the reviewer contact a number of representatives at country and regional level, namely Eastern Europe, Indonesia, Lebanon, and the United States. In addition, site visits in Québec (Canada) were likewise initiated by the consultant as a low-cost solution to collecting empirical data from the field. This allowed the reviewer to validate some of the issues and concerns raised in phone interviews with operational stakeholders.

Finally, the last issue of concern pertains to the timing of the review relative to on-going Agreement activities. Though the assessment was initiated within the timeframe indicated in the Agreement for Phase II, some of the key outputs of the relationship (i.e. the Integrated Biodiversity Management System for sector-wide application and the guide to designing regulatory instruments for biodiversity conservation) were not yet finalised. This limited the review's ability to make judgements on the relevance, effectiveness and potential impacts and sustainability of those investments. To compensate and still respond to the information needs of IUCN and Holcim, the relative performances of emerging contributions were assessed from both a retrospective and prospective standpoint. In other words, emphasis was placed on the lessons learned associated with the process of developing these instruments and their anticipated use.

1.5 Report Structure

This report is organised as follows:

- Section 2 surveys the underlying context of Phase II of the IUCN-Holcim Agreement. To place the outcomes of the relationship into perspective, it traces the genesis and evolution of their respective commitments and outlines the ToC that supports IUCN's BES;
- Section 3 details the findings of the review;
- Section 4 outlines the lessons drawn from the assessment;
- Section 5 includes the review's conclusions; and
- Section 6 presents the emerging recommendations.

Appended to the report are: (i) the Terms of Reference; (ii) the review matrix; (iii) the generic interview protocols; (iv) the names and designation of interviewed stakeholders; (v) the evolution of IUCN's business engagement; (vi) the evolution of Holcim's environmental engagement; and (vii) a comparative table of the components of IUCN's BES.

2. Context of Phase II of the IUCN-Holcim Agreement

This section presents the underlying context within which the Agreement first emerged and subsequently evolved. Building upon the distinct evolutionary pathways of both partners (see Appendices V and VI), including the way IUCN has conceptualised its approach to business engagement over the past decade (see Appendix VII), the section begins with an overview of the context and the issues that gave rise to the current relationship. However, rather than reiterate factual information on events and timelines,[1] the section is more analytical in scope and draws attention to the factors that help explain the achievements and challenges encountered in Phase II of the Agreement. This is followed by a brief account of the purpose, objectives and core activities of Phase II. The section ends with an overview of the Biodiversity Management System, as developed and applied within the context of this Agreement.

2.1 Evolving Principles of Action and Change

The IUCN-Holcim Agreement emerged at a critical juncture in the respective evolution of the two organisations. When the possibility of an agreement with Holcim first arose in 2006, IUCN was still in the early stages of developing and affirming its approach to private sector engagement before a business-weary membership (see Appendix V). While broadly recognising that achieving IUCN's mission would be all but impossible without the commitment of the private sector, some core members were reluctant to endorse the Union's efforts to engage businesses, which invariably placed the Secretariat on the defensive. Developing relationships that could yield positive outcomes for business and biodiversity became increasingly important. During this same period, Holcim was establishing its credentials, not only as a key player in the cement and aggregate sector, but as a global leader in terms of pushing for stricter environmental standards for the industry as a whole (see Appendix VI). Having long understood that it needed to be ahead of the game if it was to be part of it, Holcim initiated a series of corporate and sector-wide efforts to improve emissions standards for cement production and sought to manage quarry sites and resource consumption on a more sustainable basis through recycling, the use of alternative fuels for its cement kilns, and site rehabilitation efforts grounded in the needs and interests of local communities. Yet, in order to push beyond these achievements and maintain its license to operate in an increasingly contested field, it also needed to develop longer-term relationships with the conservation community and find a partner, similar in stature and reputation, to help it think through the meaning and application of conservation.

Hence, the development of the first IUCN-Holcim Agreement arose in a context of mutual necessity – a context that was, and arguably remains, fashioned by the relevant histories of both organisations. Each came into the relationship with its distinct organisational culture, heuristics, and experiences, which they in turn used to make joint decisions and adopt a common path forward. In the process, each had to learn new ways of collaborating and working that were neither fully profit- driven nor entirely governed by conservation imperatives. Learning where scope for action exists and where boundaries lie, what are the strengths and complementarities that each organisation brings, and ultimately, what are the values, beliefs, and ideas that guide their respective behaviours – all require time and interaction to understand and appreciate.

[1] For a succinct summary of key events, see Turner, S.D. 2010. External Review of the IUCN-Holcim Partnership Agreement, pp. 1-2. Further details on the distinct evolutionary pathways of the two organisations are provided in Appendices V and VI.

When IUCN entered into the Agreement, it operated with an evolving set of assumptions regarding the way it should engage business and the value or comparative advantage it brought to such relationships. As IUCN strengthened its ties to the private sector and learned what worked and what didn't, and as well as what could and could not be done, the models, tools and frameworks it relied upon to guide its work were continuously refined and improved upon. Its ability to leverage strategic support from key constituencies – including members, experts and regional offices – and how it organises to bring science, action and influence to bear on market-driven imperatives were but some of the concerns raised during this review. For its part, Holcim experienced the complexity of dealing with biodiversity conservation, and the challenge of scaling up the management of such efforts. Costing implications can be substantial, and the ability or willingness of Holcim Group companies to absorb the direct and indirect costs of biodiversity management necessarily varies. Phase II also saw the re-introduction of earlier ideas around the willingness of both partners to influence sector practices and strengthen/harmonise national policy guidelines with respect to biodiversity conservation. In all instances however, the playing field was found to be more complex than anticipated, and the ability of the two partners to effect change – within the timeframe of the current Agreement – was likewise more limited.

In spite of these various drawbacks, the key message that underlies this broad contextual analysis is constructive. Achieving sustainability is a complex undertaking, and organising to pursue such an end is an even more daunting task. Learning by trial and error, sustained interaction, the development of trust and reciprocity, and reliance on adaptive management are all crucial elements for achieving collective actions and long-term The implications are that mistakes are inevitable, and the heuristics organisations use to make decisions and foster change constantly need to be revised and improved upon in light of experience and lessons learned.

2.2 Phase II Purpose and Scope

In continuity with Holcim's commitment to sustainable development and the progress achieved in the first phase of the IUCN-Holcim relationship, Phase II was initiated to support the implementation of the Biodiversity Management System (see Exhibit 2.1, below) and to leverage the lessons learned in the initial phase of the relationship so as to promote sectoral and policy reforms. Specifically, the intent lay in making a "stronger business case within the company and the sector for the integration of biodiversity in operations." The notion that "biodiversity and ecosystems services can be enhanced through proper site management," and the opportunity to "engag[e] with the wider sector using the knowledge and experience gained" in the first phase provided the underlying rationale for the pursuit of a second phase.[2]

As stipulated in the joint Agreement, the objective of Phase II was "to further develop a relationship that [would] enable the effective implementation of the Biodiversity Management System (BMS) and demonstrate better biodiversity conservation and business outcomes to the Holcim Group and extend the approach to the wider building material[s] sector."[3]

[2] IUCN-Holcim Agreement – Management Response to the External Review, pp. 1, 2.
[3] IUCN-Holcim Agreement for Phase II, dated 7 February, 2011, p. 2.

To this end, the Agreement sought to achieve four distinct results:

1. Effective implementation of the Biodiversity Management System within Holcim;
2. Policies and legal instruments in selected countries have been influenced to enable the building material sector to deliver better biodiversity conservation outcomes;
3. Influence the development of sector-wide standards for biodiversity conservation;
4. Strengthening the approach to Water Management for the Holcim Group.

As discussed above, however, a central element of the approach was to make learning an integral part of the relationship. Taking into account the lessons drawn from the early stages of implementation, some of the work streams (outputs and outcomes) identified under the different result areas were subsequently changed or adapted at mid-course. These changes are reflected in the presentation of Phase II activities below.

2.3 Activities

The activities implemented in the current phase of the Agreement were directly driven by the results outlined above. This section provides a succinct account of the activities undertaken in each of these areas.

Under "implementation of the Biodiversity Management System," Holcim undertook the self-assessment and classification of relevant risks for all its quarry and cement production facilities. Congruence testing via the Integrated Biodiversity Assessment Tool (IBAT) and sample reviews of Holcim's Plant Environmental Profile (PEP) data were used to ensure the validity and reliability of completed assessments. A training document and strategy were developed to build Holcim's capacity at the local, national and regional levels. Biodiversity Action Plans (BAP) were to be implemented for 80% of sites rated as being sensitive, and the Biodiversity Advisory Panel developed the Biodiversity Indicator Reporting System (BIRS), which served to facilitate the aggregation of Holcim's exposure to risk at multiple scales of interaction. Finally, under the terms of the Agreement, IUCN and Panel members agreed to provide on-going technical support and advisory services through the identification of local experts and supplementary assistance from IUCN regional offices.

With respect to the policy engagement component of the Agreement, the entire workstream was eventually changed when it became obvious that the initial result and related activities (e.g. "a rapid assessment" of policy frameworks in all the countries where Holcim operates) would be difficult to achieve. Developed in collaboration with the IUCN Environmental Law Centre in Bonn, Germany, the focus of the policy component was changed from influencing public policies to drafting guidelines for regulators and policymakers in order to strengthen biodiversity conservation in the building materials sector. Drawing on the insights gained through the BMS and its application, as well as the expertise of the Law Centre itself, the draft guidelines are in their final stage of development and should be available for publication and dissemination before the end of the current phase.

The third result area focused on sector-wide engagement and was conceived as an opportunity to influence industry standards with respect to biodiversity conservation. Specifically, the workstream focused on strengthening relationships with industry associations through active involvement in joint biodiversity task forces, the publication and dissemination of relationship outputs (principally, the Integrated Biodiversity Management System [IBMS]), and participation in relevant events to promote the BMS and improve awareness of biodiversity management in the building materials sector. Most of these activities are on-going and the IBMS document should be finalised before the end of the current phase.

Finally, the fourth workstream of Phase II focused on improving water management in all operational sites managed by Holcim. While it was originally anticipated that implementation of the water workstream would proceed over a two-year period, the overall component was extended over the entire breadth of Phase II on account of various hurdles. For instance, the data for water withdrawal, consumption and discharge took longer to analyse and consolidate due to variations in units of analysis, which in turn pushed back the delivery of the final water risk framework and the related mapping of Holcim's exposure to water risks. Case studies are currently being undertaken to review best practices for internal learning. One-day training workshops were conducted in all regions of Holcim operations. Site water management plans and strategies to mitigate associated risk will be developed in 2014.

Exhibit 2.1 The Biodiversity Management System and Integrated Biodiversity Management System[4]

The Biodiversity Management System and the Integrated Biodiversity Management System

The **Biodiversity Management System (BMS)** was developed from 2008-2010 by the IUCN-Holcim Independent Expert Panel and is the result of a formal three-year collaboration (2007-2010) between the two partners. It responds to a growing understanding of the link between business and environment, as well as increased regulations and pressures for accountability from civil society around the use of raw materials.

The tool's main purpose is to provide an integrated approach to biodiversity management, building on current business processes and covering the entire life cycle of projects in the cement and aggregate industry – from early planning to operation and site rehabilitation. For each phase of the project cycle, a series of documents and guidelines have been developed and, according to Holcim's *Biodiversity Directive* (2011), the application of the BMS is now mandatory for all of the company's extraction operations.

The tool is designed to be implemented on three levels (policy, strategic planning and operation) in order to maintain and enhance biodiversity. It flexibly adapts to all sites and contexts, based on their specific risks and particularities. The system first rests on a "risk matrix," which helps understand the biodiversity of a given site and the impact a project will have on it, so that efforts deployed will correspond to the level of risk identified (high, medium, low). It then forsees the following approaches, as applicable:

Planning Cycle			Operating Cycle	
Opportunity Study	**Feasibility Study**	**Environmental and Social Impact Assessment**	**Biodiversity Action Plan**	**Rehabilitation Plan**
Serves to outline biodiversity hazards and risks	Provides the information needed to make an investment decision	Constitutes a detailed impact assessment on risks and mitigation measures	*(For sensitive sites only)* Enables site management to maintain and enhance biodiversity	Serves to satisfy regulations regarding impacts to the site, implemented post-closure

** Sensitive sites are those that present both a high biodiversity importance and a high risk of impact. In the case of sensitive sites only, a **Biodiversity Action Plan (BAP)** is prepared to outline the situation, targets, actions to be taken and monitoring mechanisms to implement, as well as recommendations to achieve the desired biodiversity outcomes. This plan differs from traditional rehabilitation in many ways. For instance, the BAP is usually voluntary, targets national biodiversity objectives (not only local ones) and covers the entire site (not only certain areas). In general, the implementation of this type of plan takes place over 6-12 months.

In 2012, the BMS, which had been designed specifically for Holcim, was broadened for application in the whole building materials sector as the **Integrated Biodiversity Management System (IBMS)**. And to effectively monitor and evaluate changes in biodiversity conditions, **the Biodiversity Information and Reporting System (BIRS)** was developed and is currently being tested and refined. The IBMS guidelines also explain the importance of embedding the system in companies' current policies or corporate social responsibility so as to demonstrate their commitment to biodiversity preservation.

[4] IUCN. (2013). Integrated Biodiversity Management System (IMBS): A System for Managing Biodiversity Risk and Opportunities in the Cement and Aggregates Sector, Draft, 63 p.; IUCN-Holcim Biodiversity Advisory Panel. (2013). Biodiversity Indicator and Reporting System – BIRS: A proposal for a habitat-based biodiversity monitoring system for the mineral extraction industry, Draft, 35 p.; (2010). Biodiversity Management System – Proposal for the Integrated Management of Biodiversity at Holcim sites, 119 p.

3. Evaluation Findings

The performance of Phase II of the IUCN-Holcim Agreement was assessed on the basis of the following OECD-DAC criteria: relevance, effectiveness, efficiency, and sustainability. Progress towards impact is considered within the scope of the Agreement's effectiveness. Factors affecting results are addressed separately and include perspectives on management, institutional arrangements, monitoring and evaluation, and programmatic structures, among other issues. The results discussed herein constitute a synthesis of perspectives and document reviews collated from 30 interviews with senior IUCN and Holcim staff, written sources of evidence from both organisations, and Holcim site visits in Québec, Canada. A list of data sources is appended to this report (see Appendices IV, V and VI).

3.1 Relevance

The term relevance is used here to imply the extent to which an investment addresses the needs and interests of key stakeholders and is of direct consequence to the broader setting within which it takes place. As such, this section examines the relevance of the IUCN-Holcim Agreement from the perspectives of IUCN, Holcim and the cement and aggregate sector. Stakeholder perceptions and relevance to context are used to assess the relevance of Phase II of the Agreement. **Overall, the review concludes that the Agreement was relevant to both IUCN and Holcim.** The specific issues considered in this section are as follows:

1. The extent to which the Agreement supports the interests of IUCN and its alignment with the Union's Business Engagement Strategy;
2. The extent to which the Agreement responds to the needs and interests of Holcim and its internal/external stakeholders;
3. The extent to which the Agreement is aligned with the broader interests of the cement and aggregate sector.

F1: The IUCN-Holcim Agreement supports the Union's mission and is aligned with its Business Engagement Strategy, providing tangible evidence of the private sector's capacity to contribute to the conservation of biodiversity.

The IUCN-Holcim Agreement is broadly regarded as one of the Union's flagship efforts to improve conservation outcomes in the private sector. Developed at a pivotal moment in the evolution of IUCN's efforts to further its mission beyond the Union's existing constituency, the Agreement arguably provided the first meaningful opportunity to take the biodiversity message outside of the mainstream conservation community and into the business and industrial sectors (see Section 2 and Appendix V). While finding common ground with the private sector has been a struggle for the Union as a whole, the introduction and subsequent development of IUCN's relationship with Holcim provides further evidence of the on-going shift of perception that is taking place within the Union and the constructive role that IUCN can play in bringing about change in the way business understands and mitigates its impact on biodiversity.

The second phase of the Agreement has proven to be a necessary and logical follow-up to the activities undertaken in the first phase. Though the BMS constituted the main output of Phase I, its implementation had yet to be realised, as did efforts to engage the building materials sector and achieve change across the industry as a whole. Phase II provided a near-ideal context in which to test the

Union's evolving BES and operational model for achieving change in the way business understands and manages its risks relative to biodiversity and water. Specifically, the Agreement supports IUCN's approach to the private sector, and in particular its Business Engagement Strategy by:

- Furthering the Union's efforts to engage with selected leaders in priority sectors to develop or adapt, field test and pilot new tools and other best practice approaches;
- Encouraging the building materials sector to develop, adopt and promote voluntary standards for improved management of biodiversity and ecosystem services; and
- Promoting engagement at the public policy level to strengthen existing regulatory measures in the building materials sector and extractive industries to improve biodiversity conservation and the maintenance of related ecosystem services, and thus provide a level playing field for progressive businesses that seek to make a difference.[5]

As such, the relevance of Phase II of the Agreement is directly tied to Holcim's efforts to "manage biodiversity risks so as to avoid and minimize biodiversity impacts" while seeking "opportunities" to improve "biodiversity conservation and benefits" in the areas where it operates. [6] Further, in spite of the fact that sector-wide engagement were identified as a priority area for joint action in the first phase of the Agreement, the issue was merely broached, making the prolongation of IUCN and Holcim's engagement a necessary step for delivering results in this area.

Finally, in the context of climate change and increasing resource scarcity, the need to sustainably manage water resources is likewise considered a fundamental priority for IUCN. In addition to providing IUCN with a stake in limiting the cement industry's impact on water and river basins, the Agreement also provides an opportunity to extend its engagement beyond the purview of the Business and Biodiversity Programme to include other areas of expertise within the Union. The Agreement's effort to broaden the scope of the relationship to include the Water Programme and the Environmental Law Center sets an important precedent for future engagement opportunities.

F2: By providing the means to reduce Holcim's impact at the landscape level and further the value it brings to the communities where it operates, the Agreement ultimately supports Holcim's sustainability vision and long-term business interests.

Holcim faces growing expectations relative to the way it manages its operations and minimises its impact on the environment. Whether concerns originate from State or local regulators, or from community stakeholders, extractive industries and the cement and aggregate sector in particular are increasingly challenged to both reduce their footprint on the environment and add value to the communities where they operate. While legal compliance measures remain a necessary requirement of responsible quarrying, they no longer constitute a sufficient strategy for maintaining a license to operate. By operating in distinct yet evolving socio-ecological environments, corporate social responsibility is no longer a passive goodwill gesture, but a dynamic and conditional steady state that needs to be continuously renewed and sustained.

Because Holcim Group companies have a daily impact on their environment and extraction rights can last from 50 to 100 years, buy-in from community stakeholders is crucial. This in itself helps explain why Holcim representatives were unanimous in their appreciation of the Agreement's relevance. In short,

[5] See *IUCN Business Engagement Strategy* (2012) Version 2.0, p. 12
[6] Ibid., p. 9

biodiversity conservation and sustainable water use are important because they are essential to Holcim's license to operate. Several senior staff members even went so far as to acknowledge that there are inherent limits to growth and that the long-term success of the corporation will eventually require even more fundamental changes in the way Holcim operates. To this end, the Agreement provides a critical step in the right direction.

Invariably, when Holcim staff were asked to explain the relevance of the Agreement for a profit-driven industry, responses were nearly always identical: being proactive about biodiversity saves time and resources relative to permitting processes (making it faster and cheaper to comply with national, provincial or local regulatory bodies) and creates a value-added precedent that improves relationships to communities at multiple scales of aggregation. Nowadays, the biodiversity management component is broadly regarded as a functional element of Holcim's sustainable development framework.

Assuming responsibility for, and compensating the impacts of, its operations are increasingly regarded as being crucial with the Holcim Group. As one senior official put it, "*we do this because it's good business and good for the planet*." Through its association with IUCN, Holcim gained confidence in its approach and a level of credibility that would have been difficult to achieve under any other arrangement. Internally, IUCN also added value by providing crucial guidance and key input into how to think about biodiversity and its significance for Holcim's operations. In the end, the four-part strategy (biodiversity, policy, sector engagement, and water) not only helped Holcim to further its environmental track record, but also aimed to enlist competitors in doing the same and helped produce regulatory guidelines in a bid to level the playing field and eventually scale up biodiversity conservation. For Holcim, the relevance of the Agreement ultimately lies in IUCN's strong credibility, influence, and technical knowledge.

F3: The IUCN-Holcim Agreement substantively raised the bar in terms of corporate environmental and social responsibility. It is a precedent-setting agreement with strong normative implications for the wider building materials sector.

In many respects, the preoccupations of sector players such as the Cement Sustainability Initiative (CSI) – an initiative of the World Business Council for Sustainable Development – reflect those of its key constituencies, such as Holcim. Interest in the IUCN-Holcim Agreement is thus tied to the risks that all players in the cement and aggregate sector incur, namely the factors that can ultimately affect a company's "license to operate." In most jurisdictions, habitat restoration is an obligation, but understanding how depleted quarries can be restored in favour of improved biodiversity outcomes is an area few companies can claim to master. How adjoining resource assets can be managed to leverage biodiversity gains, or how can a company can minimise its exposure to water-related risk in a contested river basin or arid climate, are all issues of fundamental importance to the sector. With both organisations occupying key positions of influence in their respective fields of authority, the Agreement was sure to gain the attention of others in the sector. As one CSI representative candidly remarked, *"what Holcim does, sets the trends."*

For the CSI, the timing of the IUCN-Holcim Agreement is particularly prescient of the challenges that member organisations are increasingly being faced with. Among the key issues that the CSI hopes to push in the coming years is the need to understand the full range of issues that affect biodiversity conservation, from ecosystems and water tables to the economics of biodiversity and sustainable land

stewardship.[7] While cement production may require less water thru-put than other sectors of the economy, its consumption remains substantial, and finding ways to understand and manage water related risks,[8] especially in water-stressed environments, represents another common point of entry between the CSI, Holcim and IUCN.[9] Finally, the CSI is currently revising its 2005 Guidelines for Environmental and Social Impact Assessment, and in this regard, the IBMS – a sector-based open-access tool that draws on the experience of IUCN and Holcim – will likely provide the core biodiversity component of the revised guidelines.

> *"The promotion of biodiversity and active management of ecosystems (including water) will create new opportunities. Companies capable of managing, restoring and enhancing ecosystems will potentially gain better access to resources and markets, and will be considered as partners of choice."*
>
> CSI, 2012 Progress Report

In sum, the achievements of the IUCN-Holcim relationship are highly relevant to the challenges that others face in the sector. IUCN and Holcim may have developed critical knowledge products to support the needs of the Holcim Group, but in doing so, they have also created a public knowledge base that can be used to leverage results across the sector and beyond.

3.2 Effectiveness

Effectiveness relates to the extent to which the objectives of the Agreement were achieved or are likely to be achieved.[10] To this end, the review focuses analytical attention on the four result areas of Phase II of the Agreement and measures progress made in the implementation of the following set of objectives:

1. Effectively implement the Biodiversity Management System within the Holcim Group;
2. Develop a policy guidance document to engage policymakers on how the building materials sector could better manage biodiversity at the operational level;
3. Influence the development of sector-wide standards for biodiversity conservation; and
4. Strengthen the approach to water management within the Holcim Group.

Collectively, these contributions aim to "demonstrate better biodiversity conservation and business outcomes to the Holcim Group and [to] extend th[is] approach to the wider building material[s] sector." Whether and how IUCN and Holcim are progressing towards this ultimate goal lies at the heart of this section.

F4: Phase II of the IUCN-Holcim Agreement succeeded in producing a number of critical outputs, but efforts to improve biodiversity and business outcomes will require more time.

As detailed in the subsequent findings of this section, Phase II of the IUCN-Holcim Agreement has generated an impressive array of critical outputs. While these will, in all likelihood, continue to draw attention and generate applications for Holcim and the wider building materials sector for years to come, the Agreement has been less successful – within the allotted timeframe – in achieving

[7] The Cement Sustainability Initiative (2012). 10 Years of Progress – Moving on to the Next Decade. WBCSD, p. 22
[8] Ibid.
[9] A task force on water, of which Holcim is a member, was recently created within the CSI, to highlight best practices, measure performance, and identify potential risks.
[10] OECD-DAC. (2002). *Glossary of Key Terms in Evaluation and Results Based Management*.

measureable changes in terms of biodiversity conservation and improved business outcomes. Given the ambitious scope of the Agreement, this is understandable. With several key outputs still in draft form (e.g. the policy guidance document, the IBMS, the BIRS, and the water mitigation plan or strategy – see Section 2.3 above as well as Finding 5 below), it remains too early to assess the actual effects of the Agreement on land use practices within Holcim and across the building materials sector, but the impact of the Agreement on Holcim's commitment towards long term change leaves little doubt. As one senior representative summed it up, *"I am more convinced today of the need for biodiversity conservation than I was seven years ago."*

Though further improvements in the implementation process will be required before comprehensive overviews of Holcim's biodiversity and water risks are developed and backed by credible action plans, Agreement partners succeeded in taking a number of important steps towards such ends. The picture that is beginning to emerge from the joint initiative may be mixed overall, but the message is clearly positive. The remaining findings of the report attempt to highlight the achievements of Phase II, the challenges it has met, as well as those it continues to face.

F5: Though internal management targets may not be achieved by the end of the current phase, BMS implementation is largely proceeding as planned.

With Phase II of the Agreement, Holcim took significant steps to rollout the BMS across all of its quarry sites. Supported by a clear corporate directive and environmental policy, Holcim began rolling out BMS at the onset of Phase II and though the initiative has met with a number of challenges, the partners now have a better sense of where the gaps lie and the issues that will need to be addressed as Holcim proceeds in its efforts to improve biodiversity and business outcomes for its operations. Strong internal communication on the importance of biodiversity and Holcim's management response to the challenges and indeed risk that such considerations pose for the future of the Group helped reinforce the need for action and commitment at the more senior levels. Training and awareness information packets on the meaning and implications of biodiversity management was initiated in 2011, and to date, Holcim has delivered training events in nearly all of the regions, and a compendium of online resources has been put together for the benefit of Holcim Group operators.

Yet, in spite of these efforts, evidence suggests that Holcim is unlikely to reach the operational risk management (ORM) targets that the group had hoped to achieve during the current Phase of the Agreement. That is, to develop biodiversity action plans (BAP) for at least 80% of sites classified as sensitive, according to the biodiversity risk matrix (see Exhibit 3.1 below).

Exhibit 3.1 The Biodiversity Risk Matrix[11]

Biodiversity Importance	Potential Impact to Biodiversity from Operations			
	Very High	High	Moderate	Low
Global	Sensitive	Sensitive	Sensitive	
National	Sensitive	Sensitive	Sensitive	
Local				
Low				

Accordingly, of the 475 active extraction sites (both cement and aggregates) operated by Holcim Group companies, 85 were classified as being sensitive and thus requiring the development of an appropriate biodiversity action plan or BAP. However, by the end of 2012, some 48 (56%) sensitive sites had developed such plans, an additional 20 sites had yet to fulfil their obligations in this regard, and the biodiversity importance of some 20% of active sites was still unknown, a portion of which could potentially harbour sensitive species, based on biodiversity mapping indices. Several inter-related factors help explain this.

First, the identification of such sites represents a formidable challenge for operational staff. Without the benefit of technical support, it is virtually impossible for operators to ensure that the biodiversity value of every site under their jurisdiction is properly assessed. Yet, few if any operators have the necessary background and/or expertise to judge whether endangered/threatened species or important ecosystem features can be found on their sites, or what to do with these once they are identified. The fact that biodiversity management is not something that can be intuitively applied makes it even more challenging for those who are tasked with making judgments on the risk they face. As noted by nearly all interviewed Holcim representatives, most site operators and environmental managers are engineers by training, not biologists, which is one of the key reasons why Holcim chose to work with IUCN on these matters.

Second, and related to the previous point, finding local partners who can support BMS implementation and the analysis of Holcim's exposure to biodiversity risks proved more difficult than anticipated. IUCN and Holcim had originally assumed that such expertise could be identified and recruited from within the ranks of the Union's membership and broad network of experts, however IUCN does not possess an operating structure that would enable such broad scale outreach.[12] Local and/regional collaboration between IUCN regional offices and/or members did take place in a few isolated cases, but the level of mobilisation that Holcim needed could not be met. Understandably, this affected the speed and rigor of implementation efforts.

Finally, in the absence of certainty over the state of biodiversity in a given site and the related dilemma of what to do about potential risks once they are flagged, can justifiably create strong impediments to change, and/or a willingness to downplay such risks. Moreover, given that biodiversity management

[11] Source: Holcim

[12] For further dicusssion on this issue, see Section 3.5.

within the broader cement and aggregate sector remains largely experimental, and that few if any of the institutional and economic contexts wherein Holcim Group companies operate currently reward such investments, the incentive to do more than what appears necessary may be limited. This may help explain why, for instance, when Holcim requested IUCN and Birdlife International to map the potential biodiversity importance of its sites using the Integrated Biodiversity Assessment Tool (IBAT), that the Biodiversity Advisory Panel (BioPan) gave such a poor review of the level of consistency in self-reported data. In comparing the IBAT data with Plant Environmental Profiles (PEP) for 2010 and 2011, the BioPan observed that Holcim's exposure to biodiversity risks was likely being under-reported for a number of issues, including: (i) sites with elements of Global Biodiversity Importance, (ii) the actual level of biodiversity risk across the Holcim Group, and (iii) the presence of significant biodiversity elements outside the Biodiversity Importance Category (BIC) criteria – notably for invasive species and Karst ecosystem features. In their preliminary conclusion, BioPan members reported that *"evidence of uptake and implementation of the BMS [was] patchy and fairly weak."* In recognising such discrepancy, one senior manager stressed that sooner or later, Holcim will need to become more transparent about the actual status of its biodiversity risk. Otherwise, "*we [will] face a credibility challenge in explaining the selection of so-called sensitive sites*." To this end, the IBAT results were provided to each operating company to further knowledge uptake, and increase the confidence in data that is being reported.

To overcome the potential for bias, country managers do call upon external experts to assess sites that present distinctive features or are thought to harbour sensitive species. The problem is that such detailed inventories are costly to produce and, under current conditions, none of the Group companies can afford to carry out such assessments for all of their sites. Moreover, Some even admitted that they actually face incentives to downplay the need to carry out a full assessment or confirm the presence of a rare species or unique ecosystem, since such occurrences could potentially limit exploitation activities and/or create additional cost burdens.

Of course, these issues are not new to IUCN or Holcim, which is why the Biodiversity Panel invested much of its energy in the latest phase of the Agreement to develop a monitoring and evaluation framework that would at once bring consistency in the assessment of biodiversity risks, and create measurement standards that could then be compared across sites and/or aggregated at multiple scales, in the form of Key Performance Indicators. While still in draft form, the Biodiversity Indicator Reporting System (BIRS) is currently being tested and refined, but is unlikely to be ready and scaled up for use prior to the end of Phase II. Drawing on a coarse filter approach that is designed to assess the extent of habitat, its condition and its uniqueness, the instrument primarily seeks to measure the *suitability for biodiversity*. In this way, it provides a "site biodiversity condition index" that can be used to illustrate relative change over time. In the development of the BIRS, the panel was asked to ensure that the guidelines clearly showed the linkages between the BMS and BIRS, namely that the implementation of the BMS is to effectively manage sites, whereas BIRS should serve as a monitoring system to assess changes over time. However, whether and how the BIRS can be used to reliably measure change over time by different people (especially if measurements are not supported by GIS mapping data to ensure consistency) – remain open questions. So while the value added of the BIRS approach leaves little doubt, especially for measuring land management efforts or changes in the suitability of an existing biophysical system over time, the practical application of the tool may need to be tested and refined further.

Though there are no effective means of validating the number of sites that actually implement the BMS, evidence suggests that considerable progress is being achieved in some countries. Sri Lanka, for instance, conducted inventories and successfully developed action plans where needed shortly after the launch of the BMS. Other countries like the United States, have partnered with the Wildlife Habitat

Council and should have finalised inventories for all of their sites and developed, where required, appropriate Biodiversity Action Plans by the end of 2013 and in collaboration with Canada, joint efforts have been made to support migrant bird populations, through the installation of dedicated box feeders. In other jurisdictions such as Lebanon, there is an even more aggressive push to go beyond existing regulatory standards to set examples of good biodiversity management through well thought out rehabilitation in all of the sites managed by Holcim. Given the critical nature of some of the issues raised in this finding, there is an obvious need and opportunity to share such experiences on a wider and more deliberate scale.

F6: Policy guidelines for the cement and aggregate sector took longer to develop than anticipated, but their creation sets an important precedent for IUCN and should provide Holcim and others in the sector with a useful instrument to effect change in the countries where they operate.

The process of defining the scope of work for the policy component of the IUCN-Holcim Agreement took longer than expected. The original intent was to develop a case-by-case synthesis of the policy gaps in all the jurisdictions where Holcim operates, so as to better target interventions and create an appropriate tool or guide to help shape legislation and public policy. However, the feasibility of such an approach turned out to be more complex and problematic than expected, thus requiring a revised and more realistic appreciation of what could feasibly be achieved within the scope of the Agreement and the resources available.

To help Agreement partners think through what could feasibly be achieved in the realm of institutional reform, the Environmental Law Center (ELC) – a programme component of IUCN, located in Bonn, Germany – was called upon to provide guidance and lend its expertise. Being its first ever engagement with the private sector, a period of mutual learning and adjustment foreseeably occurred. But by strengthening the meaning of law and policy, as well as the role of legal institutions in the governance of rule-order relationships, the shift in the policy workstream eventually contributed to the development of a more practicable and transferable regulatory instrument for safeguarding biodiversity across the entire building materials sector and related surface mining industries.

In this sense, the very creation of these regulatory guidelines constitutes an important achievement for IUCN. Though known for its capacity to convene and influence policymakers – including its involvement in nearly every major multilateral environmental agreement created in the last several decades – IUCN has comparatively less experience in terms of affecting the regulatory environments wherein the private sector operates. In this sense, the ELC's involvement in the IUCN-Holcim relationship marks an important first for the Union and the Business and Biodiversity Programme, in particular the Business Engagement Strategy. The IUCN-Holcim Agreement thus marks the first serious attempt to effect change in private sector legislation.

This being said, the possibility of affecting the underlying rules of the game remains contingent on what the two partners expect to do with the proposed set of guidelines. The dissemination of the policy product has not been planned out, and no firm commitment exists regarding the actual use of the product. Unless efforts are deployed to remedy this situation, current investments are unlikely to lead to change in the regulatory environments wherein Holcim and sector players operate, and the proposition or assumption that IUCN has the capacity to effect policy reform in the private sector will remain untested.

F7: The pursuit of an ambitious conservation agenda is creating a strong pull effect within the broader cement and aggregates sector.

Within the current Agreement, IUCN and Holcim had agreed to (i) broaden sector engagement towards improved biodiversity conservation; (ii) strengthen sector-wide standards in relevant trade associations; and (iii) improve awareness of biodiversity management in the building materials sector. In support of these objectives, the Holcim-specific BMS tool was adapted to support the sustainability interests of the major cement and aggregates associations, such as the Cement Sustainability Initiative (CSI), the European Cement Association (Cembureau), the Federación Interamericana del Cemento (FICEM), and the Union Européenne des Producteurs de Granulats (UEPG). While discussions on the final nature of the proposed IBMS are currently taking place, the final version of the tool should be delivered before the end of the current Agreement. For its part, Holcim maintained its involvement in the CSI task force on biodiversity and land stewardship, which it helped to create in 2008, and recently joined the newly created task force on water.

More specifically, Holcim helped develop the CSI's 2011 Guidelines for quarry rehabilitation, which are now aligned with Holcim's own reporting requirements. It introduced IBAT as a common screening tool for sites of global or national importance to task force members, which has since been used by Titan, Lafarge, Cemex, and possibly Italcementi. It is currently helping with the creation of sector-wide guidelines for biodiversity management plans based on the tools developed by IUCN. Holcim also proposed IUCN to the CSI as a key informant for all relevant CSI products, and it is now working with UEPG (the European level aggregate producers association) to develop biodiversity indicators, using initial input from IUCN.

With regards to its partnership with IUCN, Holcim gained high exposure in a number of platforms, including the 2012 World Conservation Congress and the Convention on Biological Diversity Conference of Parties. Through these and other venues, Holcim was able to showcase its risk-based approach to biodiversity conservation and water resource management, and to advocate its positions on this topic. This has in turn generated interest from the banking sector on how to manage biodiversity risks.

It is difficult to tell whether Holcim's contributions and active participation in different communities of practice, though substantial, are driven by the objectives of the second phase of the Agreement or the leadership role it has long pursued. In effect, Holcim has always had a strong commitment to the CSI and is perceived as an influential player and pacesetter amongst its peers. For Holcim and the CSI alike, the need to establish minimum requirements across the board is seen as a crucial first step towards long-term change – a process that will ultimately help Holcim by creating a more level playing field. As one Holcim manager summed it up, *"we do not want to be the best in a dirty industry; we want to be the best in a clean industry."*

Evidence suggests that IUCN and Holcim are exercising a positive influence in terms of setting sector-wide standards on biodiversity management. The perception that "*what Holcim does, sets the trends*," as one industry representative put it, raises the hope that the Agreement will have a long-lasting effect on the sector. In effect, by encouraging the sector as a whole, including regulators and policymakers, to "apply sustainability standards and safeguards that positively impact biodiversity" and adjoining communities, the Agreement sets an important precedent for experimenting with ways of scaling up results in the private sector.

F8: The Agreement has helped to generate a robust baseline assessment of water resource use for all of Holcim's operations. Though management guidelines and mitigation strategies are still being developed, the less abstract nature of water resource management should translate into a more rapid deployment and reliable uptake of relevant tools and methods.

Though lower in comparison to other industries, the cement and aggregates sector nevertheless has an impact on water resource systems through consumption and discharge (e.g. the cleaning of trucks). In quarries, extractive activities can limit water availability in the surrounding drainage system by lowering the water table, which in turn can affect local communities and other relevant stakeholders. As part of the current phase of the IUCN-Holcim Agreement, the fourth and final workstream sought to develop and establish a water management system for Holcim's business units worldwide. While more ambitious in scope than the biodiversity component (scaled up to all Holcim sites), water is first and foremost a localised issue and, in most circumstances, it represents a technical problem that can readily be identified, measured and addressed using knowledge and available technologies.

The main goal of the water component was to develop a tool that would support efficiency gains, provide a basis for engaging with local stakeholders and improve risk-management capabilities with regards to water. While these risks vary from one region to the next, the water management scheme devised through the IUCN-Holcim Agreement provides both a global performance perspective and local risk assessment. To this end, three distinct instruments have been developed to favour water conservation. First, a Water Directive was announced to formalise Holcim's commitment across the Group; second, a Water Measurement Protocol was developed to ensure common understanding of water-related terminology, measurement and accounting methods; and third, a Water Risk Methodology or Framework was outlined to assess Holcim's exposure to risk. Currently, case studies and guidelines are being prepared to identify and understand ways of improving water-related performance through various mitigation strategies. Examples of good practice are being documented to share with others and encourage their replication.

The process of working toward these water management outputs and objectives was not without obstacles, however. The assumptions used to guide water-related interventions were neither tested nor validated before entering into the Agreement. This in turn affected progress in terms of implementation, including IUCN's ability to deliver quality outputs in a timely fashion. Though the issues that gave rise to tensions have yet to be fully acknowledged or addressed by the two partners, it is clear from all sides that the Water Risk Assessment Framework constitutes a major achievement and should provide a meaningful basis for improving water conservation within Holcim operations in the near to mid-term future.

In the end, the framework that was developed provides an integral mapping and composite database of all Holcim operating sites – including quarries, cement production plants, and ready-mix sites –, which can now be used as a baseline to monitor change. And with this in hand, a critical mass of information now exists to support Holcim's efforts to improve water management in the Group.

3.3 Impact & Sustainability

This review was asked to consider the impacts that have been or that are likely to be produced as a result of the Agreement. Impacts are broadly defined as "the positive and negative changes produced by a development intervention, directly or indirectly, intended or unintended."[13] In development contexts, impacts are broad in scope, long term in duration, and refer to levels of change that lie beyond the immediate control of individual actors and/or organisations. However, as the previous section on Effectiveness clearly shows, it remains too early to tell if such results are likely to be achieved in the foreseeable future. For this reason, a prospective approach to the likelihood of impact was used instead. Specifically, the review sought to understand whether over time, current investments are likely to produce net positive benefits in terms of biodiversity conservation and water resource use.

However, by shifting the level of inquiry from impact to the conditions that are likely to support such achievements, the distinction between the latter and the question of sustainability become blurred. In effect, sustainability focuses analytical attention on the degree to which the benefits (i.e. results) of an intervention (i.e. the Agreement) are likely to continue, once formal arrangements come to an end. In short, if the results of the Agreement are unlikely to be sustained, then the potential for impact will also dissolve.

Hence, this section considers the extent to which the Agreement was successful in establishing the conditions that are likely to support long-term commitments and investments towards the achievement of Phase II results. The discussion focuses on the following elements:

- **Context:** The extent to which the contexts wherein Holcim operates (i.e. the different social, political and economic environments) support its efforts to improve biodiversity and water use outcomes;
- **Motivation:** The extent to which the Holcim Group considers biodiversity conservation and sustainable water management as being essential to long-term success;
- **Strategy:** The extent to which the Agreement fostered a sound strategy (i.e. Theory of Change) for scaling up results, both within Holcim and across the sector as a whole;
- **Capacity:** The extent to which Holcim has acquired or developed the necessary systems, processes, and capacities needed to scale up Agreement results.

F9: The different contexts within which Holcim Group companies operate are rapidly changing. While weak regulatory environments and limited market pressure may still limit returns on biodiversity investments, the demand for social and ecological sustainability will only increase in the near to mid-term future, giving Holcim a comparative advantage over less sustainable competitors.

As reflected throughout this report and Finding 3 in particular, the IUCN-Holcim Agreement comes at a critical moment in our understanding of earth systems dynamics and the fundamental dilemmas that humanity must now confront. In a context where sustainability is no longer viewed as a luxury but as a vital necessity, benefits and opportunities will go to those businesses and sector leaders who are able

[13] OECD-DAC Criteria for Evaluating Development Assistance. Available at: http://www.oecd.org/dac/evaluation/daccriteriaforevaluatingdevelopmentassistance.htm

maintain the flow of ecosystem services and benefits, while adding value to the communities where they operate.

Hence, the move to address and/or incorporate biodiversity concerns is neither new nor restricted to Holcim. For instance, the CSI indicates that 14 of its 15 reporting members currently apply the Environmental and Social Impact Guidelines it developed in 2005. Ten of these indicate that 85% of their quarry sites have rehabilitation plans, and a similar number report that 55% of their sites have community engagement plans. Notably, 14 of the 15 reporting members note that 38 to 100% of their quarries with high biodiversity values have effective plans in place to manage such concerns.[14]

Other contributing factors to changes in the landscape include the CSI's efforts to push through the adoption of the Environmental Product Declaration (EPD) for concrete, which aims to quantify the environmental impacts of concrete using life-cycle assessment methodologies and third party verification mechanisms.[15] The CSI is also moving towards the development of Responsible Sourcing Schemes for concrete. The criteria for globally relevant and responsible sourcing would include environmental, social and economic aspects, which would then be communicated to construction professionals independently.[16]

For these reasons, the water management and biodiversity management components of the Agreement need to be regarded as investments, rather than expenses. The Agreement has arguably provided Holcim with a set of tools that can reduce its exposure to risk and ensure that Group companies remain ahead of the curve. Given the rapid pace of environmental change that is now taking place, such assets are only likely to increase the corporation's profitability over time, as opposed to those operators who maintain their current, more traditional strategies.

F10: By pursuing a conservation agenda in the midst of economic uncertainty and internal restructuring, Holcim sends a clear signal that it is committed to developing a more sustainable and socially responsible business model. In terms of sustainability, the challenge lies in maintaining such high-level corporate commitment.

As emphasised by nearly all external stakeholders, Holcim is broadly recognised for its environmental leadership. It has consistently been at the forefront of the cement and aggregates sector, playing a key role in setting the environmental standards by which the entire industry should be judged. In this sense, the Agreement does not signify a change of policy. It merely reflects the Group's corporate social responsibility and its commitment to environmental sustainability. Truth be told, however, the main driver of Holcim's impressive track record (see Appendix VI) is neither based on altruistic motives nor environmental concerns. It is rooted in common business sense and the understanding that a sustainable industry ultimately leverages comparative advantages that can result in increased market shares, efficiency gains, reduced transaction costs, or improved relations with key stakeholders, including regulators and community leaders.

[14] Ibid, p. 21
[15] The Cement Sustainability Initiative (2012). 10 Years of Progress – Moving on to the Next Decade. WBCSD, p. 25.
[16] Ibid.

In a context where licensing rights for extractive industries are becoming increasingly difficult to obtain, and social barriers to resource extraction are themselves becoming harder to comply with (see Finding 7 above), the need to constantly improve the industry's track record is predicated on the need to fulfil its core business. More to the point, *"we need to demonstrate*," argued one senior official*, "that we are good land stewards and can generate value over a 50- or 100-year period. We need to show that we can bring value to the places where we operate.*"

> "*As a provider of aggregates, Holcim needs a framework of responsible quarrying. We need a strong business case that can demonstrate a comprehensive and sound industrial approach to quarrying – a comprehensive operational model that provides a sensible business approach*."
>
> Comment from a senior Holcim official.

Though there is no indication that improved biodiversity conservation efforts currently provide Holcim with a distinct competitive advantage, they do reduce Holcim's exposure to risk, which in turn makes it more "permitable" and ultimately profitable. Moreover, evidence suggests that even within Holcim, sustainability is not entirely driven by executive orders. To paraphrase what several operational staff indicated, *"we all have families, and we all want to leave a better future for our children."* In Québec for instance, efforts to integrate water and biodiversity concerns are neither new nor limited to quarries and cement production sites. For over a decade now, local managers in ready-mix and quarry sites near Montréal have been working with local community groups, schools, and scouting associations to carry out conservation initiatives such as the protection of riparian zones, the rehabilitation of degraded sites, and the introduction of nesting shelters for peregrine falcon and local bat populations. In Michigan (USA), managers and workers joined forces with the State Department of Natural Resources and local community leaders to eradicate various invasive specifies. In Drummondville (Québec), managers of a ready-mix facility are actively collaborating with city councillors and local conservation groups to turn a section of the company's property into a viable wetland. Interestingly, none of the workers and managers spoken to in Drummondville had even heard of Holcim's biodiversity and water directives, or of the Group's relationship to IUCN or what IUCN stands for. Given the relative importance of Holcim's commitment to biodiversity and the fact that all employees have the potential to act as ambassadors for what the Group seeks to achieve, both in their local communities and related political arenas, the limited level of awareness is indeed puzzling.

Admittedly, there have been extensive personnel changes in Holcim since Phase I was launched, including the more recent change of CEOs. However, in spite of these changes and the sluggish economic conditions that prevail across many of the markets where Holcim operates, the budget dedicated to the Agreement has remained unaltered and the commitment to stay the course never faltered. Yet, the momentum and determination that stakeholders observed in the first phase of the relationship seemed to have waxed and waned. Today, the signals that senior managers put forward are viewed with ambiguity by those in the field, including the limited investments that have so far been made to strengthen the capacity of operational staff and managers, and/or ensure that biodiversity risk assessments were indeed accurate, valid and reliable across Group companies. While recognising that it takes time to foster transformative change, a number of high-ranking officials, both within and outside of Holcim, argued that in the end, "*management has to send a clear message that this is important"* and "*critically improve staff confidence and capacity"* to implement the biodiversity directive. While "*taking the [biodiversity] message to top management [may be] a long and arduous process*," as one Holcim representative put it, evidence drawn from this analysis also suggests that fostering ownership of the conservation agenda across Holcim Group companies and the related sector may yield higher levels of change than simply top-down directives.

F11: Efforts to scale up biodiversity conservation within Holcim and across the sector are not supported by a clear performance management framework that can be used to plan, monitor progress, test assumptions, and improve actions at the outcome and impact levels.

As conceptualised, Phase II of the IUCN-Holcim Agreement is grounded in a set of four results that implicitly aim to improve biodiversity conservation and business outcomes within Holcim and across the wider building materials sector. The four result areas or workstreams are themselves broken down into activity-focused outputs, milestones (referred to as "outcomes" in the tables), and output-based indicators. While useful for planning activities and delivering output-related products and services that will ultimately contribute to the achievement of expected results, the framework stops short of explaining the changes in behaviours, systems and policies which will need to occur if biodiversity conservation and business outcomes are to be improved, and how IUCN and Holcim actually plan to achieve those intermediary outcomes that will contribute to longer-term change. Without clarity on the logic model of the Agreement – specifically, the chain of outcomes that shows the relationship between immediate and intermediate outcomes, and the impact(s) that should follow, along with the assumptions that support the hypothesised causal relationships –, the ability of either partner to thoroughly plan, implement, monitor, and revise the actions, assumptions and results that support long-term change will be drastically diminished.

Building on this analysis, the review finds that Holcim and IUCN have not clearly laid the contingency relationships that support the achievement of the Agreement's main objective. In the absence of a robust strategy that fully integrates the elements discussed herein, efforts to sustain long-term change and/or achieve impact – whether within Holcim or across the cement and aggregates sector – are unlikely to produce their desired effects. Moreover, without such an overview of the level of effort needed to direct change, the actual inputs and resources required to achieve the desired level of change will likely be underestimated, as is currently the case with the handful of individuals upon which the entire organisation of the four workstreams now rests.

Overall, evidence suggests that inadequate thought has been put into the development of a comprehensive Theory of Change, one that fully recognises the breadth of actions and results needed to bring about improved conservation and business outcomes (see Factors Affecting Results).

F12: The skills and capacity needed to manage towards improved biodiversity outcomes and the mechanisms used to ensure compliance and rigour are inadequate for achieving long-term change.

Implementation of the BMS and the water management framework rely on extensive suites of measurements, protocols, and risk-based frameworks to assess the performance of Holcim sites relative to biodiversity and water.[17] While arguably comprehensive and thorough, notwithstanding the misgivings of Panel members regarding the oversimplification of the biodiversity risk assessment process, the extent to which these are effectively implemented and utilised to inform decision-making ultimately depends on two crucial variables: first, that the people who are asked to use and complete the required forms and procedures have the requisite knowledge, skills and abilities to do so; and

[17] With regards to the BMS, Holcim site managers are asked to complete Plant Environmental Profiles, Environmental and Social Impact Assessments and/or Rapid Biodiversity Assessments, the Biodiversity Risk Matrix, and Biodiversity Action Plans. All of these are guided by Holcim Directives and Policies and Targets. Water management is governed by the Water Directive, the Water Protocol, Targets, the Water Risk Management Framework, and related mitigation strategies.

second, that effective mechanisms are established to monitor and enforce compliance, ensure credible commitments to standards and directives, and encourage valid and accurate reporting.

Capacity

Regarding those who are tasked with completing relevant documents, assessment grids, questionnaires, and other forms, the review found that among the small sample of operational managers interviewed, no respondents felt personally confident about their knowledge and understanding of biodiversity, how to measure it, and how to manage or mitigate potential impacts from on-going operations. Moreover, confidence levels correspondingly fell when the question was directed at the technical competence and skills of those operational staff who worked under their authority. When asked about the major challenges that Holcim and IUCN faced in terms of ensuring the sustainability of current investments and achieving the Agreement's intended results, responses invariably centred on the need for further training, capacity building, awareness raising and dedicated resources to support implementation. These, according to interviewed staff, are either missing or insufficient for achieving or maintaining long-term results.

The existence of such a knowledge gap and the fact that it risks undermining Holcim's efforts to successfully implement the BMS were readily acknowledged in interviews with senior Holcim representatives. Without shying away from the fact that "*capacity at the local level is our biggest challenge*," as one manager put it, the original intent of Phase II was to leverage IUCN's broad network of experts and regional offices. In the end however, the Union's ability to tap into such resources turned out to be fairly limited. While some efforts are now being deployed to close this gap (e.g. more effective online training and regional workshop sessions),[18] interview respondents stressed that existing capacity needs far outweigh available opportunities, and that more diverse and cost efficient solutions will need to be developed. In effect, operational managers considered that to become fully implemented and results-focused, biodiversity conservation will need to become instinctive and procedural (e.g. like health and safety considerations), as opposed to abstract and isolated from day-to-day management obligations. This, they insisted, can only occur with strong management support, clear commitment from the executive, and a thoroughly developed strategy with well-defined targets.

Compliance

Review of the self-reported data by the BioPan (against IBAT data) has shown a tendency to under-report the risks. While such Panel verifications have been crucial in lending credibility to the process, more will need to be done to ensure the full institutionalisation of biodiversity concerns. According to stakeholders both within and outside of the Holcim Group, dedicated efforts to seriously manage biodiversity concerns are only likely to be achieved if they become central to the Group's assurance process, and thus subject to third-party verification by a biodiversity expert who could close potential gaps between reported PEPs and actual biodiversity risks. Though BMS implementation is led by a clear directive, the absence of dedicated enforcement measures and robust monitoring mechanisms arguably limits the impetus for compliance. With lax enforcement come the central problems of commitment and reduced willingness to contribute to the maintenance and provisioning costs of valued public goods, such as biodiversity conservation.

[18] Ibid., pp. 2-3.

In terms of corporate governance, it makes sense to limit potential impacts on biodiversity and water because this ultimately limits the corporation's exposure to risk. Such an approach implies the need for credible assurance, for as one observer pointed out, *"you are ultimately as bad as your worst site."* Yet, as Nobel laureate Elinor Ostrom strongly emphasised, *"without monitoring, there can be no credible commitment; [and] without credible commitments, there [are] no reason[s] to propose new rules,"* such as the directives that underlie the Agreement. Periodic external audits or verifications can help secure not only compliance, but also stakeholder and shareholder confidence in an organisation's capacity to manage risks. At the moment, Holcim has not made specific commitments to adopt a corporate assurance mechanism similar to what Rio Tinto uses (see Boxtext below).

Rio Tinto and Corporate Assurance

Rio Tinto relies on its Corporate Assurance function to secure independent and objective assurance on the adequacy and effectiveness of the Group's systems for risk management, internal control, and governance, together with recommendations to improve the efficiency and effectiveness of the relevant systems and processes. The function has adopted international auditing standards set by the Institute of Internal Auditors (IIA).

The function operates independently of management, under a mandate approved by the Audit Committee and the Committee on Social and Environmental Accountability (CSEA) and has full access to all functions, records, property and personnel of the Group. The head of Corporate Assurance reports functionally to both the Audit Committee and the CSEA, providing each committee with information relevant to their specific Terms of Reference.

A risk-based approach is used to focus assurance activities on high-risk areas and audit plans are presented annually to the Audit Committee and the CSEA for approval.

3.4 Efficiency

Within the scope of this review, efficiency refers to how well IUCN and Holcim used available resources to meet their objectives. By convention, efficiency is commonly defined in terms of cost per unit of output, and measurement is determined by the extent to which aggregated outputs (and by extension, outcomes) represent a reasonable return on investment.[19] Efficiency, or cost-effectiveness, focuses attention on the means used to achieve valued ends[20] and whether these were delivered at the least possible costs or succeeded in achieving the most amount of benefit per unit of resources.

In this section, efficiency is assessed on the basis of stakeholder perceptions and the extent to which expenditures were in alignment with anticipated costs. Specifically, the review sought to understand:

1. The extent to which Agreement results (output and outcome levels) and benefits arising from relationship activities are commensurate with the level of effort and resources expended;
2. The extent to which IUCN and Holcim have been effective in minimising transaction costs and delivering value-for-money; and
3. Whether programmatic objectives were achieved in the most efficient way, compared to available alternatives.

[19] Lusthaus, Charles, *et al.* (2002). *Organizational Assessment: A Framework for Improving Performance*, IDRC/IADB, Ottawa/New York

[20] Stein, J. G. (2002). *The cult of efficiency*. Toronto: House of Anansi.

F13: While the Agreement is praised for delivering value-for-money, a more inclusive, strategic, and deliberative planning process would have reduced the likelihood of delays in implementation, changes in programme design, and gaps in the achievement of results.

Phase II of the Agreement was praised by nearly all interviewed stakeholders, and senior Holcim representatives in particular, as having delivered value-for-money. While stakeholders from both sides of the Agreement had reservations about specific issues (e.g. miscommunications, timeliness and time lags, changes in targets and strategies, and technical support in the field), the line of consensus between the two partners centred around the fact that differences were eventually ironed out, and that Agreement components were satisfactorily completed or delivered in spite of the hurdles that were met. When review respondents were asked whether the Agreement was a worthwhile investment, the response received from nearly everyone was a clear and unconditional yes.

From Holcim's perspective, the opportunity costs of either pursuing Phase II components by itself or with the assistance of another partner far exceeded the benefits that such alternatives could feasibly provide, and would never account for the additionalities that only IUCN could deliver in terms of technical expertise, credibility, and global presence. Likewise, Holcim's stature in the cement and aggregates sector, its commitment to environmental sustainability, and its willingness to engage in long-term change made it a natural fit for IUCN, and an efficient use of its own scarce resources. While the Agreement was mostly successful in delivering planned results according to budget and schedule, Phase II also met a number of challenges that arguably reduced the returns generated per unit investment or that are likely to be generated in the near to mid-term future.

Phase II was planned at the tail end of the first four years of the relationship, and was specifically designed to be operationally focused – seeking to implement the systems, tools and ideas that were produced in the first stage of the Agreement. Drawing on the 2010 review of the first phase of the relationship, it was jointly developed by the Holcim Group Support (HGRS) unit and IUCN's Business and Biodiversity Programme, with additional consultations within the Union itself. Since then, the implementation process has faced a number of important hurdles, which have arguably affected the delivery of results and increased the transaction costs of both partners, including: (i) changes in the design of the policy component and the nature of its deliverables; (ii) difficulties in developing and implementing the water workstream; and (iii) challenges in terms of implementing and scaling up the Biodiversity Management System (see Section 3.2). Regardless of the reasons that underlie these and other associated difficulties, evidence suggests that most if not all of these issues could have been readily addressed through a more inclusive, strategic and deliberative planning process.

In the first instance, the IUCN Environmental Law Centre – if not as an implementing body then certainly as an expert advisor – was not invited at the design phase of the Agreement to assess the feasibility of the policy workstream that was first proposed. Early inclusion of all relevant sources of expertise could have reduced long-term costs and delayed implementation, allowing for a greater likelihood of results achievement.

In the second example, the development and delivery of the water management component faced a number of challenges at the inception and delivery phases. Although all key outputs for this workstream were eventually delivered, the two partners incurred costs and delays that could have minimised if not avoided altogether. Initiation of a more open and deliberative assessment of the proposed Agreement, in the early stages of planning, along with a more judicious probing of the assumptions that underlay the proposed logic of deliverables and the potential risks (e.g. availability and quality of the data required to

fulfil Agreement expectations) would have established a clearer understanding of the tasks involved and the level of effort required to achieve such ends.

Finally, and of related relevance to the two preceding observations, the Agreement was developed on the basis of assumptions that were never validated and a programme theory that was both incomplete and untested. As previously discussed in Finding 11, the Agreement is grounded in a logical framework that spells out the specific activities and outputs that are to be achieved, but fails to explain how partners expect to achieve improved biodiversity conservation and business outcomes in Holcim and across the sector. By not strategically thinking through the causal logic of the intended results and identifying the assumptions that support the related theories of change and action (e.g., the inability of IUCN to call upon its broad constituencies to support implementation of agreements made by the Secretariat), the cost-benefit ratio of selected investments has arguably been reduced.

Within the constraints of the existing Agreement, evidence suggests that resources were efficiently managed. Efforts were made to minimise costs, solutions were brokered, and most of the outputs associated with the Agreement should be achieved by year's end. However, when assessed in terms of whether an alternative approach could have leveraged further efficiency gains and a higher cost-benefit ratio in terms of results achievements, the counterfactual argument that underlies this finding suggests that this would have indeed been possible. A more inclusive, deliberative and strategic planning process would have, *ceteris paribus*, generated higher returns to both partners in terms of results and lower transaction costs overall.

3.5 Factors Affecting Results

In the preceding sections, the Agreement was assessed in terms of relevance, effectiveness, impact/sustainability and efficiency. While the picture that emerges from this analysis is positive overall, the review does highlight a few issues that could potentially limit the Agreement's ability to "demonstrate better biodiversity conservation and business outcomes" to Holcim and others in the sector. This section considers the factors affecting implementation and delivery of Agreement-related results. Both strengths and challenges are used to qualify the Agreement's overall performance, including: (i) the factors that affect Holcim's ability to achieve planned conservation results; and (ii) the factors that affect IUCN's ability to deliver technical assistance and support.

F14: Though the relationship was carefully managed, the Steering Committee was not as effective in setting clear directions and addressing emerging issues in a timely and proactive manner.

The relationship between the two organisations in this phase of the partnership was largely positive, though that is not to say that it was devoid of disagreements and occasional tensions. As in any relationship, be it between individuals or organisations, difficulties are inevitable and challenges can never be fully anticipated. Communication, trust, reciprocity and cooperation occur in dynamic organisational settings, where new imperatives and issues continuously arise: in short, effective relationships can never be taken for granted. Overall, open communication and regular information sharing helped overcome challenges and ensure the delivery of programmatic results during this phase.

To begin, certain key structural components of the Agreement supported and facilitated management and coordination of activities. For instance, the Relationship Managers were important players in strengthening the rapport between the two parties. Having one go-to focal point in both organisations helped create clear channels of communication and coordination of activities. Though simple and direct,

this method also had its drawbacks in that it limited the opportunities to share and vet ideas with a broader range of people and to fully apprehend or integrate the challenges of running complex systems.

For its part, the Steering Committee (SC) was recognised as a constructive intermediary body that monitored progress towards results and provided guidance, as required. The SC has had important discussions throughout Phase II, but its ability to respond to emerging challenges in a timely manner has been less evident. While some stakeholders attributed their observations to a possible lack of authority, others pointed out that the role of the SC was in fact more technical in the second Phase of the Agreement, thereby limiting its ability to make managerial decisions that could potentially affect workflows in either organisation.

From Holcim's perspective, responsiveness to requests has likewise not been as effective as it could have been. While this is linked to the previous discussion on the Steering Committee, it can also be explained by a lack of communication and clearly defined expectations, roles and perspectives. As with any cooperative endeavour, relationship building and maintenance is a never-ending process that continually needs to be renewed, affirmed and reinvigorated. Partnering is not a one-off process: as relationships evolve, the values and interests that partners bring continually need to be emphasised.

In effect, feedback received from both organisations indicates that this partnership has produced valuable lessons in relationship building. As one senior Holcim representative pointed out, regardless of momentary tensions or misunderstandings between the two organisations, *"the relationship is based on open dialogue."* Over time, the partners were able to overcome issues and move toward realising their mutual commitments. In this sense, the two were of like mind in their desire to deliver on original goals and successfully complete planned activities. Most importantly, feedback highlights that lessons learned will serve to improve future relations, both in and outside of the current relationship.

F15: The meaning and implications of biodiversity conservation and the capacity needed to address such concerns remain inadequate for the tasks at hand.

Over the years, the Holcim Group has demonstrated a clear commitment and strong willingness to improve biodiversity outcomes within its operations. While informants and stakeholders commend the Group for setting ambitious goals and targets, a clear commitment is not a guarantee of the firm's capacity to act. The evidence collected suggests four main areas where Holcim faces important challenges that, left unaddressed, could continue to limit its ability to attain outcomes. They include challenges related to understanding the meaning and implications of biodiversity management, the development of strong technical skills, the costs of effecting change, and the use of reliable monitoring and reporting frameworks.

Managing Biodiversity

Despite attempts to integrate biodiversity concerns into Holcim's organisational culture and structure, efforts to communicate the meaning and implications of biodiversity conservation throughout Holcim have been insufficient. In fact, evidence drawn from a small sample of conversations at three different Holcim sites in Québec revealed that in all instances, none of the operational staff responsible for managing environmental issues knew of the existence of the biodiversity or water directives, and what needs to be done relative to these areas. A clear understanding of biodiversity and its importance constitutes a solid foundation for technical capacity building, and weaknesses at this stage can be detrimental to skills building.

While water conservation can be readily understood, quantified, measured and addressed by operational staff, biodiversity is not as tangible for most people, making its importance more difficult to grasp. Even at its most basic level, an operator who wishes to conserve biodiversity requires, at the very least, some general knowledge of the surrounding biota, the unique features of the landscape, and the biophysical dynamics that sustain the biodiversity in question. Making sense of these elements is a challenge, and the current ability of site managers to manage towards improved biodiversity conditions appears limited. Misinterpretations are easy to make and can lead to inefficiencies or counterproductive efforts, especially in tropical and sub-tropical environments where all surrounding biota can potentially be considered "sensitive."

Similarly, an incomplete understanding of biodiversity can hamper the development of appropriate action plans. Site managers expressed difficulties in terms of understanding the specific purposes and objectives of biodiversity conservation efforts. How to establish acceptable targets and performance indicators (especially for animals) and do so while maintaining sight on the company's business objectives – and unavoidable exploitation of resources – were but some of the issues raised by interview respondents. Of course, IUCN and Holcim never intended to place such responsibilities in the hands of operational managers, which is why the initiative sought to foster partnerships between Groups companies and local biodiversity experts. This however, is not occurring everywhere, and even when such linkages are established (e.g., Indonesia), the fact remains that site managers need have some basic conceptual understanding of what an appropriate solution might consist of. The margin between strict conservation and mitigation strategies can indeed be significant (e.g., site rehabilitation).

The inherent conceptual challenge of biodiversity and its implications in terms of excavation site management may explain Holcim's insistence that key concepts and requirements be simplified to facilitate uptake. While some may perceive this as an "oversimplification" of what would be the ideal, the truth of the matter is that Holcim has to leverage buy-in and uptake by means of communication that do not "overcomplicate" the issues, and do so with a body of managers that is already considerably taxed in terms of other performance reporting requirements. Add to this the inherent complexities of biodiversity management and the appeal to reduce the number of steps and requirements appears justifiable.

Technical Capacity

Interviewed stakeholders from all sides of the Agreement expressed concerns over the challenge of building institutional capacity across such a large corporation as Holcim. Without a robust and on-going effort to effectively and continuously support the implementation of the BMS, the gains achieved in the various Group companies will remain fragile.

Though evidence suggests that the BMS is broadly understood, its application remains a challenge. Even BioPan members concede that effective application of the tool involves many integrated steps that also need to be applied across the life-cycle of a quarry, and that such efforts cannot be reliably undertaken without prior knowledge and training. To be fair, Holcim has always been upfront about the fact that it does not have the internal capacity to evaluate biodiversity risks or develop viable mitigation strategies. In part or in whole, the company was interested in working with IUCN because of the Union's extensive network of experts and regional offices that could supplement its own capacity gaps. But as previously discussed, IUCN is not always able to leverage the involvement of its experts and regional offices in support of the Union's business engagements. Though local partnerships have been successfully established in some instances (e.g., with the West Asia Regional Office in Jordan and Asia Regional Office

in Bangkok), IUCN has neither the institutional mandate to carry out such a level of involvement, nor does it have the capacity to reach out to such constituencies.

While training is being provided within Holcim, the Group's reliance on a demand-driven approach does not appear to be sufficient to support existing needs. In effect, operational respondents underscored that the lack of local capacity is arguably the single greatest challenge that Holcim Group companies face in terms of implementing the biodiversity directive. To be realistic, the ambitious goals of the Agreement would need to be supported by an equally ambitious capacity-building effort. Setting targets and objectives may be useful for directing attention, but it is not enough, from an operational perspective, to favour implementation. In addition to more varied and repeated training opportunities, site managers expressed the need to further the sharing of knowledge, lessons and experiences across the Holcim Group, especially with regards to the development of viable action plans and approaches that can help reduce operational costs. Case studies, webinars and briefs that can be shared across an internal community of practice would be helpful in instigating action and further support the replication of good practices. In the end, several operational managers were of the opinion that the initiative was unlikely to take hold if it was not somehow routinized in everyday activities. To this end, some suggested that a document or directive that outlines key measures would provide a crucial first step.

Effecting Change

In light of the many challenges associated with the conservation of biodiversity, it appears in hindsight that completing a baseline survey of all quarry sites may have been overly ambitious. While Holcim should be commended for its efforts to be at the forefront of the sustainability curb, the decision to address biodiversity concerns in a single and decisive sweep may have actually limited the effectiveness of implementation efforts, including opportunities to learn from experience and to scale up emerging best practice.

Moreover, implementation of biodiversity conservation can generate significant costs for Group companies. Without clear operational models that factor in such costs and ways to offset them, the pace of implementation and effective change in terms of biodiversity outcomes will likely remain sub-optimal. In addition to the costs of carrying out credible inventories and devising viable management plans, the implications of biodiversity management were unclear to most operators. For instance, how should sensitive or endangered fauna be managed; what should be done if endangered species are located in areas under license to excavate; how can excavated sites be realistically rehabilitated and/or restored to support biologically significant systems, when the underlying edaphic and mineral conditions are themselves completely transformed? Obviously, the answer to any one of these questions has cost implications, and these will vary with the degree of change that will be pursued. Deciding on an optimal cost-benefit ratio and figuring out how to pursue such strategies are issues that most operational managers are ill-prepared to deal with.

Finally, biodiversity concerns are largely perceived as add-ons to normal management tasks. In conditions where operational managers are already over-extended, their ability to take on new responsibilities may be limited. Devising sensible ways of implementing biodiversity management under the wide range of conditions within which Holcim Group companies operate is a challenge. When combined with the fact that local or national regulatory frameworks are not always aligned with the intent of the BMS, it appears increasingly obvious that achieving improved biodiversity and business outcomes will take longer than anticipated.

Monitoring, Reporting, and Enforcement

In terms of monitoring, reporting and enforcement, evidence suggests that improvements to the current system will be needed if long-term changes relative to biodiversity conservation are to be achieved. To this end, existing Plant Environmental Profiles are considered too *"patchy,"* as one respondent put it, to support the decision-making needs of Holcim. More will need to be done to ensure that self-reporting processes yield credible evidence of effective biodiversity management at the site level. While the current approach may be suitable for measures that are low in costs but high enough in benefits to warrant credible reporting, such an approach might not be suitable for activities that could potentially generate significant costs or uncertainty in terms of future resource use. And without effective means of monitoring and enforcing compliance with the exigencies of the BMS directive (e.g. third-party certification, verification or audit), incentives to shirk such responsibilities will likely remain strong.

Though part of its risk management strategy, Holcim's efforts to implement the BMS have not been backed by a more robust corporate assurance mechanism. Such an approach would help obtain independent and objective assurance relative to the adequacy and effectiveness of the Group's approach to risk management.

F16: The Agreement highlights possible limitations to IUCN's Business Engagement Strategy. How IUCN organises itself to mobilise science, action and influence to strengthen private-sector commitment towards biodiversity conservation and human wellbeing is not clear from a programmatic perspective nor from an organisational standpoint.

As discussed in the context section of this review, and developed further in Appendices V and VII, IUCN's approach to business engagement has steadily evolved over the past two decades. Admittedly, developing trust and commitment from its core constituency (i.e. members) regarding the private sector has been a struggle for IUCN, but in the long term, this has also been to its advantage. By having to develop and substantiate a robust rationale for engaging business, members have also forced IUCN to carefully consider how it aims to effect change within this new constituency, and substantiate the added value or comparative advantage that it brings to the table.

Until now, IUCN's approach to business engagement has not been formalised in a clear and consistent Theory of Change (ToC). This is understandable, given that efforts in this direction are relatively new and that the need to maintain some adaptive flexibility precludes the possibility of an elaborate operational framework. Yet, evidence drawn from this review points to a possible lack of clarity between the means and ends of IUCN's approach to business engagement. To bring this point forward, a tentative outline of the Union's emerging ToC was developed using the 2012 Business Engagement Strategy and other related documents[21] (see Exhibit 3.1 below). In light of its most recent experience with the Holcim Group, this finding explores the underlying logic of IUCN's approach to business engagement and, in particular, the assumptions that support the achievement of improved conservation outcomes.

To begin, at the input level, IUCN relies heavily on its strong convening power and extensive network of experts to help support the development of new tools and approaches, provide expert guidance, and establish arenas for joint discussion on critical conservation issues. While the core inputs outlined in Exhibit 3.1 arguably lie at the heart of the Union's comparative advantage in the broader conservation movement, its ability to leverage such strengths in support of private sector engagement is not as clear.

[21] The proposed Theory of Change was developed using the 2012 Business Engagement Strategy. Core inputs were derived from the publication *"Our Planet Needs Solutions – IUCN, the global union for a sustainable future."*

For instance, though IUCN is recognised for its ability to mobilise broad networks of experts to address emerging conservation issues, its capacity to do the same in the realm of the private sector is less evident. Case in point, Holcim's ability to leverage IUCN's network of experts during the current phase of their joint agreement was largely unmet. Yet, the notion that the "IUCN network in the Secretariat and Membership (organizations and Commissions) [*can*] work together to create synergies to address complex and controversial scientific issues" relevant to the private sector remains central to IUCN's engagement strategy[22] – an assumption that was strongly defended by the most senior representatives of the Union, but openly questioned by others. While recognising that this network constitutes a key element of IUCN's value proposition in the realm of public policy, this review brings into question the Union's ability to do the same for the private sector. This is an area that IUCN will need to be attentive to as it refines its value proposition to the wider business community.

Further, even if this were a possibility, some interview respondents cautioned that because NGO members tend to be assertive of their independence from IUCN, they would be less likely to apply the tools and methods developed by the Union. In wanting to make the approach their own, the reliability of the BMS, for instance, would be altered and with it, the benefits of working within the network. In such instances, working with private consultants might be more appropriate for the tasks that Holcim has to complete.

Second and related to the previous point, how IUCN organises itself to deliver science, support actions, and influence public policy and private sector standards is not readily apparent. Though results have been achieved at the output level, such as innovative partnerships (e.g. stronger linkages with the CSI and the IUCN-International Council on Mining and Metals (ICMM) platform for stakeholders) and new tools and approaches (e.g. BMS, BIRS, Water Risk Framework, regulatory guidelines for policymakers), the available means used to leverage such products are not always clear. IUCN's value proposition and capacity to convene the expertise of commissions, members and collaborators may be suitable for influencing public policy related to protected areas, endangered species, or sustainable ecosystem management, but such a model does not appear to be appropriate for the private sector. In fact, the lack of clarity on how IUCN organises itself to deliver its work caused many external stakeholders to question the actual nature and extent of the Secretariat's contributions. Rightly or wrongly, the perception from the outside is that the linkages between inputs, outputs and intermediate outcomes explored in Exhibit 3.1 are fragile, and that these will need to be substantiated and communicated more clearly so as to reduce the likelihood of ambiguity and instil stakeholder confidence in IUCN's contribution.

Third, though IUCN assumes a relatively equal involvement and influence of all actors (government, private sector and civil society) to achieve intended outcomes, this may be difficult to ensure in practice. Evidence points to challenges in terms of civil society involvement in public decision-making venues, as well as decreasing government willingness or capacity to regulate private sector activities. In this view, the approach taken in the IUCN-Holcim Agreement to work at the sector level and with key trade associations should prove to be a more fruitful way forward.

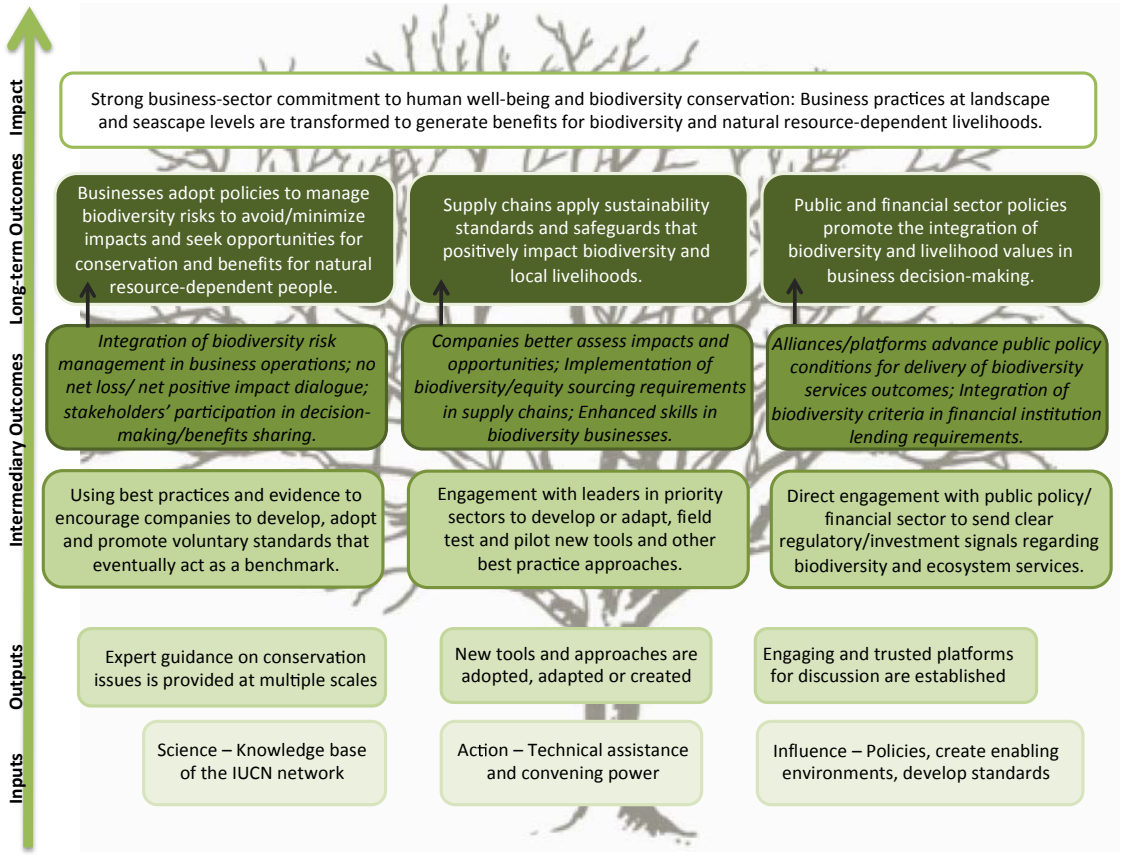
Finally, the Agreement also suggests that the challenge of achieving outcome-level results may be tied to the lack of clarity regarding the assumptions that support the purported causal relationships. In effect, the business case for improved biodiversity management remains to be made. Efforts to reduce exposure to risk may provide a strong rationale for engaging in improved mitigation strategies, but the

[22] IUCN Business Engagement Strategy, Version 2.0 (2012), p. 13.

extent to which these are sufficient to drive change in the way the Group manages its resource assets or scales up interventions to achieve net positive impacts remains doubtful. Unless biodiversity conservation can somehow generate increased returns through efficiency gains, competitive advantages or greater market opportunities, the likelihood of sustained and substantive change will likely remain subdued.

In addition to developing a balanced portfolio of interventions, IUCN must now work toward defining a ToC that operationally clarifies how its contributions should cumulatively and logically lead to changes in the behaviours and practices of private sector operators, and how these should in turn contribute to improved biodiversity conservation. The tentative outline of IUCN's ToC for business engagement (see Exhibit 3.1 below) undoubtedly provides only a gross approximation of a far more complex reality, but the fact that so many external respondents questioned the Union's overall approach to the private sector suggests that these elements are not clear, and that they could potentially hinder future engagement opportunities. While Phase II of the Agreement was seen as a chance to clarify IUCN's operational model and further refine expectations at the output level,[23] the review finds that these goals were only partly achieved. If IUCN wishes to generate more substantive changes in the way the private sector understands and manages towards improved biodiversity conservation, the articulation of a clear and relatively robust ToC will be crucial.

Exhibit 3.2 Emerging ToC for Business Engagement



[23] *IUCN-Holcim Agreement – Management Response to the External Review,* p. 3.

4. Lessons Learned

Arguably, the significance of the IUCN-Holcim relationship and its relative performance have to be considered in the context of the fundamental changes that have marked the recent history of both organisations. The Agreement treads an unbeaten path in environmental governance and as such, mistakes are inevitable. Trial and error learning is crucial to the achievement of sustainable outcomes.

Time and Relationship Building

As illustrated by the two phases of the IUCN-Holcim Agreement, organisations require time to develop effective relationships. The changes envisioned in Phase II are considerable and they stand to affect not only the way biodiversity and water are managed by the building materials sector over the long term, but also the organisational cultures of the two partners. In fact, some argued, one the key unexpected lesson of the IUCN-Holcim Agreement was how the relationship came to affect the beliefs, values and ideas of both partners. *"Transformative change,"* as one senior official put it, has occurred in both organisations, leading to a newfound respect for the value or contribution that NGO/private sector interactions can bring, in terms of improved environmental governance.

Unlike other forms of engagement however (e.g., achieving change in public policy), the effectiveness of such collaborative efforts likewise depends on the joint commitment of all others in the field. Fostering relationships with the broader sector is essential for avoiding free riding behaviour and create a more level playing field. Holcim cannot possibly bear all the costs of change, if competitors refuse to share the burden of contributing to the public good of biodiversity conservation. As with any sustainability investment, returns invariably develop over prolonged periods of time and in this sense, both partners are doing the right things to turn investments made through proactive relationship building into positive gains for biodiversity.

IUCN's Organisational Structure

The BBP was broadly viewed as instrumental in the success of the relationship, and a critical driving force for the implementation of the biodiversity and water conservation agenda within Holcim. However, it is also constrained by its limited in-house capacity and ability to draft experts to provide input on key conservation issues, especially with the private sector. Regional offices likewise function as independent units with their own programmes and sources of funding.

While IUCN brings credibility through trademark branding of Holcim's efforts, some informants, both within and outside of Holcim, openly questioned IUCN's added value in terms of the actual work accomplished. The Secretariat does have staff with biodiversity and conservation expertise, but in effect, the problem is structural: evidence suggests that silos between programmes remain relatively strong, with a comparable reticence to engage with the private sector. Yet, the review has also shown that IUCN has the capacity to adapt quickly to changing conditions or contexts, and deliver state of the art technical support. The issue for IUCN, and the Secretariat in particular, is not whether it has the capacity or not to provide strong technical support to the private sector, the question is how best to organize to deliver such support. Evidence of IUCN's responsiveness and creativity in finding workable solutions to the challenges confronted over the last three years provides confidence in the Union's ability to sort out the technical details that affect the delivery of its work and contribution.

Holcim's Operational Capacity

As explored above, one of the biggest challenges Holcim faces is that of local capacity to both evaluate biodiversity risks and develop appropriate mitigation strategies. Regardless of the presence or absence of local experts, the fact remains that in-house capacity is essential if the initiative is to become integrated into Holcim's organisational culture. As one stakeholder put it, *"to seriously implement, one needs capacity."* Other firms, such as Lafarge, Cemex and Heidleberg have taken steps toward having expertise on board. Their objectives are less ambitious, and they are also more selective in their efforts. While Holcim has strategic players that can effectively push the conservation agenda, there are doubts as to whether it has in-house capacity to make biodiversity conservation a realistic proposition. With only three people to service the information needs of a global operation, Holcim's ability to roll out the BMS is arguably stretched for the time being. Developing viable operational modalities, realistic expectations and a theory of change that incorporates the strengths and limitations of the Group's internal resource capacity will prove crucial to the long term success of Holcim's change efforts.

Learning by Trial and Error

Though it is generally agreed that the two partners were successful in developing a constructive and productive relationship, Phase II of the Agreement was not without its difficulties. Prior consultations were not always carried out before making decisions, leading to occasional frustrations and misunderstandings, which, as both organisations now recognise, could have been avoided altogether. Long-term commitment requires time, communication and the development of mutual trust and reciprocity. In this sense, open and effective communication and deliberation are paramount to reducing the likelihood of misunderstandings.

As Phase II of the Agreement comes to a close, IUCN and Holcim are now more aware of their differences, but also more conscious of their complementarities and what each brings to the table. Mistakes are inevitable, but what matters is that both organisations have been able to learn from their experiences, and both are arguably better off today than when the relationship was initiated, some seven years ago.

5. Conclusions

The Agreement is highly relevant to IUCN's mission/BES as well as Holcim's vision/interests. It sets important standards for the wider sector to emulate.

While the Agreement supports efforts to engage sector leaders – including at the policy level – to improve biodiversity management, as well as broadens the scope of IUCN's commitment to the private sector, it also provides Holcim with the opportunity to improve relationships with different constituencies and reduce its transaction costs. This precedent-setting Agreement is relevant to the challenges faced by the wider sector, having fostered the development of knowledge products that can be applied to effect change.

Phase II of the Agreement has demonstrated progress in terms of attaining outputs, but outcomes have yet to be achieved.

While BMS implementation is progressing, concerns remain regarding the reliability of its tracking system, as well as the costs related to effecting change. A robust baseline assessment of water management was produced, and because this component is less abstract in nature, uptake is expected to be easier. Overall, the Agreement's agenda creates positive pull in the sector, as awareness and action around biodiversity have increased. Though policy guidelines help strengthen IUCN's value proposition and harmonise industry standards, the absence of a clear dissemination strategy could limit their usefulness.

Holcim's efforts to improve biodiversity and water conservation are supported by a favourable environment and clear commitment. However, investments to strengthen capacity, achieve measurable change, and ensure compliance remain sub-optimal.

Holcim's commitment to sustainability and valuation of biodiversity concerns provides confidence in its ability to deliver results over time, but its willingness to bear the costs of these efforts is less clear. For outcomes to be achieved, actions must be strategically planned and emphasis must be placed on capacity building and assurance mechanisms. So though success stories are now emerging, evidence suggests that the achievement of tangible changes in biodiversity and business outcomes will require more time.

The Agreement provides value-for-money, but a more inclusive, strategic and deliberative planning process would have generated greater efficiency.

Though some challenges – such as changes in the policy component and difficulties in developing the water component – have increased anticipated costs, both partners recognise that the Agreement has produced good value-for-money. By ensuring the inclusion of relevant stakeholders, lengthening the deliberation process, and expanding upon results achievement strategies, efficiency could have been greater.

The Agreement faced a number of challenges in terms of making authoritative decisions, building operational capacity, and pursuing an ambitious conservation agenda in unfamiliar circumstances. Leveraging lessons will be crucial for guiding the way forward.

In this regard, the role and authority of the Steering Committee is vital to ensure that influence is exerted in the appropriate forums. Likewise, continuous support is necessary to increase operational capacity, and the assumptions underlying the Agreement and IUCN's BES require further refinement in order to effectively guide actions and attain impacts.

6. Recommendations

The following areas of recommendation are for indicative purposes only. They point to emerging issues that could potentially help improve the intended results of the Agreement. They are provided here to test the feasibility and value-added for IUCN and Holcim.

R1: The programmatic intentions of Phase II of the IUCN-Holcim Agreement should be brought to a useful conclusion. IUCN and Holcim should (i) develop a working model (i.e. Theory of Change) of how and under what conditions the BMS and the BIRS are likely to be fully integrated and acted upon; (ii) test and refine the model and its assumptions in different settings/regions; and (iii) scale up interventions and carefully monitor results.

Currently, the Agreement has only partially succeeded in achieving its intended results, and it would be within IUCN's and Holcim's interest to see that the relationship accomplishes what it set out to do, namely "to demonstrate better biodiversity conservation and business outcomes to the Holcim Group and [to] extend th[is] approach to the wider building material[s] sector." As formulated, the evidence gathered in this review suggests that Phase II was overly ambitious.

Biodiversity management is a complex undertaking, and one of the central lessons of this Agreement is that it cannot be effectively deployed over vastly different socio-ecological environments, each of which are faced with different prerogatives and interests. A more cautious and progressive methodological approach appears warranted. Starting with the premise that effective biodiversity management is first and foremost governed by the underlying set of conditions wherein it takes place, priority should be given to understanding the set of variables that tend to support sustainable outcomes, and by extension, the conditionalities that would support an effective deployment of the Biodiversity Management System. This can be done through developing a ToC and testing the model in different settings, all the while carefully monitoring the results so as to improve upon the model.

R2: With the technical backing of IUCN and members of the Biodiversity Panel, Holcim should strengthen the capacity of operational and management personnel, so they can better understand the meaning and value of biodiversity conservation, reliably measure relevant risks, as well as plan, implement, monitor and report on mitigation strategies.

The partners' seriousness related to moving beyond rhetoric requires a concrete commitment in order to make concepts and ideas come alive, and to demonstrate how biodiversity and water management have a broad-scale effect – not only on the health and value of the local environment, but also on the livelihoods of local populations. Success stories are emerging, and more should be done to capitalise on common experiences to build on best practices and strengthen implementation.

Overall, more must be done to convey the importance of biodiversity, to inform all operators about the biodiversity directive and its significance, and to better communicate the level of change that is being sought. This involves, for instance, improvements in the understanding and management of Karst landscapes and ecosystems – including the micro- and macro-fauna of these systems –, and pushing for stricter guidelines.

While from Holcim's point of view, Phase II of the IUCN-Holcim Agreement is an *"unqualified success"* and has the potential to be continued in a subsequent Agreement, what this would entail is unclear for the moment. For its part, Holcim will need to take on a more proactive approach. If the firm is serious about making a difference in terms of biodiversity outcomes, it will need to get back to basics (i.e., focus on capacity building and slowly develop the necessary competencies to deal with issues effectively).

Over the past few years, Holcim has come across many challenges, and this review clearly suggests that time will be needed for Group companies to assimilate the BMS and begin the process of achieving tangible results.

To this end, Holcim may wish to consider opportunities for establishing a help-desk function, with the support of IUCN, to support the obligations of Group companies. Given the need for on-going technical assistance, the demand for just-in-time guidance and/or support is only likely to increase in the coming years, as more and more Group companies develop, implement and monitor their strategies for improving biodiversity and water resource use outcomes. While the business case for hiring a full-time biodiversity expert may still be weak, securing access to a dedicated group of experts that can support the technical information needs of operational staff may prove to be worthy investment. Since transaction costs are likely to be lower if individuals familiar with the BMS and Holcim's internal reporting and accountability measures were to assume responsibility, Holcim should work with IUCN to establish such a function. In addition to providing a strong value-for-money, Holcim's efforts would continue to benefit from the legitimacy of IUCN's strong international credibility.

R3: To ensure compliance and secure the legitimacy of its efforts, Holcim should consider strengthening its internal/external auditing process to fact-check the validity of self-reported data in periodic but non-specific cycles of two or three years.

As currently implemented, the BMS relies on self-reporting mechanisms that offer little or no assurance in terms of reliable analyses and valid accounts of existing risk factors. Without clear monitoring and enforcement measures, site operators will invariably face strong incentives to minimise costs associated with compliance and related exposure to risk. Building on the lessons of environmental governance, it seems apparent that real change tends to be more easily effected when stakeholders are committed to achieving results, and ownership can be reinforced through careful monitoring, such as internal/external audits or verification processes.

R4: IUCN and Holcim should jointly determine how they should best disseminate the knowledge products resulting from their partnership.

The Agreement has sponsored the development of several important knowledge products, including the IBMS, the BIRS, the Water Management Framework, and the Policy Guidelines for the building materials sector. While some of these are still in the process of being finalised, there appears to be no clear dissemination strategies associated with these instruments. The partners should determine how they could leverage such investments to improve biodiversity conservation within the cement and aggregates sector and possibly across other large footprint operations in the mining and/or extractive sectors. However, in order to move beyond dissemination and achieve long term change, a more robust engagement strategy will need to be devised (see R5 below).

R5: To achieve the intended impacts of the BMS, IUCN and Holcim should jointly consider how they could leverage sector-wide commitments towards conservation planning and ethics.

The desire to move away from bilateral agreements to more cross-sectoral and multi-sectoral approaches is consistent with IUCN's desire to achieve conservation impacts. The idea, as explained by the BBP, is to leverage strong business sector engagement for human wellbeing and biodiversity conservation. Further, these types of arrangements would limit liabilities associated to the selective pressure that invariably follow one-on-one situations, wherein expertise may quickly become channelled and specialised to the point of losing some adaptive potential.

With the development of the IBMS, the BIRS and increasing sector engagement (the CSI and policy tools), IUCN is indeed poised to play a more critical role in advancing biodiversity concerns in the mining and extractive industries. Yet, without more specific ventures to test innovative ideas and initiate new strategies at a manageable scale (e.g. BMS, BIRS and Water Risk Assessment tool), IUCN also risks having little to offer at the sectoral level. The assumption that cross-sectoral approaches would yield interest from a larger group of companies, more resources, greater buy-in and opportunities to pilot new initiatives remains to be tested.

IUCN could play a central convening role in developing a multi-sectoral approach, while working with and through other network-based organisations such as the WBCSD and IFC. IUCN should appoint a liaison for the WBCSD and be proactive in sharing developments and knowledge products so as to improve usability and increase adaptive potential of relevant instruments. The BMS will survive if a strong community of practice is built around it and if industry understands that it is within its interest to minimise risk and increase social responsibility.

In addition, IUCN could play a more significant part in explaining the limits of ecosystem and planetary boundaries. Biodiversity is regarded by some actors as being an isolated issue, and the Union could contribute to changing this perspective and generating buy-in from the industry as a whole. More specifically, it could inform about standards and guidelines for resource investments and heavy footprint industries such as aggregate quarries. To this end, training opportunities and rapid needs assessments could potentially be offered to CSI members.

For its part, and through its participation in the CSI, Holcim can also play a critical role in strengthening the sustainability of the industry by up-holding its commitment to biodiversity management and establishing high standards for the industry as a whole. In this sense, Holcim can give clear signals to the industry and policymakers and help define the terms under which the industry should operate.

R6: The IUCN Secretariat should take time to reflect on recent experiences with the private sector to revisit its Business Engagement Strategy and the assumptions that support it.

As highlighted on numerous occasions in this report, what IUCN purports to achieve and how it organises to do so often appear to be at odds, if not unclear. While IUCN's Business Engagement Strategy (BES) is not specifically grounded in a ToC, the Union's approach is structured around a fairly clear set of results (i.e., "entry points") and assumptions that detail how it intends to achieve these (i.e., the processes or strategies and interventions it will use to affect change). And one of the key underlying principles of the BES is that IUCN can act as a Union and call upon its network in the Secretariat, membership and commissions to work together.

Results of this review suggest that this assumption is questionable on several fronts. First, agreements with the private sector are not binding to the Union but the Secretariat itself. Second, as an organisational component of the Union, the Secretariat does not necessarily have the resources on hand to handle such obligations, though it might face strong incentives to manage such agreements on its own for myriad reasons (e.g. reduced operating and transaction costs, in-house management of benefits, funding to support staffing arrangements, etc.). Third, though the global programmes have a history of successful collaboration, *"silos remain strong,"* as one senior official put it, and if IUCN wishes to engage with the private sector on a more regular basis, it will need to devise ways of working across the current programming structure, ensure equal representation in decision-making processes, and the involvement of all key actors when it comes to framing the boundaries of what can and cannot be done.

As such, the ways in which IUCN adds value to relationships with the private sector – beyond the mere use of its name and global reputation – will need to be clarified. If IUCN's strategy centres on the Union and what the Union can offer, then it will have to redefine its business and operational models to specify the assumptions that underpin the causal relationships of the strategy (i.e., chain of results) and the processes that explain how IUCN will organise itself to achieve the intended outcomes of the strategy. This would include the respective roles and responsibilities of the Secretariat (global programmes), regional offices, members and networks of experts (i.e., commissions). While such a reflexion should be led by the Business and Biodiversity Programme (BBP), it necessarily extends beyond the scope of BBP and will need to involve all levels of IUCN's Global programme, including internal decision making processes and institutional structure (i.e., arrangements between programmes, initiatives, members, commissions, etc.).

Appendix I Terms of Reference

External Review of Phase II of the IUCN-Holcim Agreement

A. Background

In 2011, IUCN entered into a second three-year agreement with Holcim, one of the world's leading suppliers of cement and aggregates. Phase II builds on the achievements of the first agreement and aims to support the effective implementation of the Biodiversity Management System, demonstrate better biodiversity conservation and business outcomes to the Holcim Group and extend the approach to the wider building material sector. Phase two has four key areas of work:

- Implementation of the Biodiversity Management System: IUCN and Holcim will develop tools, build capacities and establish indicators for ensuring the effective implementation by Holcim's operations on the ground.
- Influencing policy: IUCN and Holcim will work with policymakers to enable the building materials sector to deliver better biodiversity conservation outcomes.
- Sector-wide engagement: The partners will work together to influence the development of sector-wide standards for biodiversity conservation.
- Water management program: Strengthening the approach to Water Management for the Holcim Group, including developing tools for measuring and mitigating water risk.

The agreement is implemented on an annual basis through an annual workplan and budget by dedicated relationship managers in both Holcim and IUCN. In support of the agreement, a Biodiversity Advisory Panel has been established to provide scientific and quality assurance support in select areas of Holcim activities. The activities of the panel have been agreed through a Terms of Reference. A Steering Committee, composed of both IUCN and Holcim representatives, oversees the programme as a whole.

B. Commissioning Authority

This review is commissioned on the authority of the Director General of IUCN, as outlined in section 12.4 of the Agreement. The review will be managed independently by the Planning, Monitoring and Evaluation Unit on behalf of the Director General and the Parties to the Agreement.

C. Intended users and audience

The intended users of the review include the IUCN Director General, the Chief Executive Officer of Holcim, the IUCN-Holcim Steering Committee, the Relationship Managers for both IUCN and Holcim, the IUCN Business and Biodiversity Programme, the IUCN Water Programme and the IUCN Environmental Law Centre. As per the IUCN Evaluation Policy the review will be publicly available on IUCN's website.

D. Purpose of the review

Phase II of the IUCN-Holcim relationship will come to an end in December 2013. The review is intended to evaluate the results and value of the relationship and programme so far. The review therefore, aims to critically assess the challenges and opportunities encountered in Phase II of the IUCN-Holcim

relationship and draw lessons and recommendations for improvements in each organization. The review will also explore areas of work and trigger discussions on the nature and scope of future collaborations between both organizations.

E. The specific objectives are:

- To assess the extent to which the expected results of the Agreement have been fulfilled;
- To identify lessons and provide IUCN with recommendations which inform and improve the development of future bilateral agreements with companies and engagement at sector level as well as the IUCN Business Engagement Strategy;
- To identify lessons and provide Holcim with recommendations which will further support implementation of biodiversity and water-related systems in their extractive operations, especially:
- With regards to sustainability of the results of the Agreement;
- As a measure of overall impact on biodiversity;
- With regards to uptake of the water risk framework.

F. Scope of the Review

The scope of the review covers all aspects of the "Programme Agreement" between Holcim and IUCN, agreed in 2011. In particular, this includes the activities of IUCN and Holcim under the agreement and the functioning of the Biodiversity Advisory Panel.

G. Evaluation methods

The review will make use of standard evaluation data collection techniques (surveys, interviews, document review) and will be supplemented by data and analyses collected for the monitoring report of phase II. A proposed stakeholder interview list of 20 to 30 interviewees will be provided to the evaluator(s).

The review will be supported by a matrix of issues, questions, indicators and data sources to aid the review team in their data collection and analysis, but will not serve as a limit to their investigation. A proposed evaluation matrix can be found in the annex.

H. Qualifications of evaluator(s)

IUCN is looking for (an) experienced evaluator(s) with a track record in evaluating NGO-corporate relationships. The evaluator must be able to demonstrate sound judgment and ideally have a good understanding of IUCN's way of working with business. The evaluator(s) must have significant experience in both qualitative and quantitative social research and possess the necessary software to carry out statistical analysis. Strong communication skills, both written and spoken, are a must, as are highly-developed interpersonal skills. Knowledge and contacts in the cement and aggregates sector are also desired.

I. Deliverables

- Inception report/note
- Draft report for review by IUCN and Holcim
- Facilitation of discussion on draft report and recommendations
- Final Evaluation Report

J. Timeframe

Subject to agreement, the milestones for this review include:

- Development of the Review Inception Note (the review team's reaction to the Terms of Reference, methodology, workplan and detailed budget) and workplan by the evaluator(s) (May 2013)
- Data collection and analysis (June-August 2013)
- Provision of the draft report (September 2013)
- SC discussion on external review (including presentation of draft findings) (October 2013)
- Finalization of the review report (November 2013)

Appendix II Review Matrix

Key Questions	Sub Questions	Illustrative Indicators	Data Sources/Methods
Relevance			
To what extent does the agreement support the interests of IUCN?	How does the agreement support the delivery of IUCN's mission? • To what extent is the agreement aligned with the objectives of IUCN's Business and Biodiversity Programme and more specifically the IUCN Business engagement Strategy? • How important is this agreement, relative to the Union's efforts to engage with the business? • Have the terms of the agreement been used to improve IUCN's outreach to the business sector?	The degree to which: • the agreement serves as a model for business engagement; • the agreement is used to leverage partnerships with others; • the benefits of the agreement are broadly known and widely shared within the Union; • the added value of the agreement is cited / referenced in Union publications / reports	Interviews: • Programme staff; • Senior management; • Relevant commission members /external experts (e.g., panel) • Secretariat members • Documents: • Relevant IUCN publications, annual reports, Congress proceedings • IUCN Council decisions
To what extent does the agreement support the interests of Holcim?	• How does the agreement support Holcim's business priorities? • How does the protection of biodiversity / conservation of water resources fit in its overall business strategy? • What benefits does Holcim draw from the agreement? • To what extent has the agreement changed the way conservation is perceived within Holcim?	The degree to which: • the agreement is supported by senior management & operations; • conservation is a priority for Holcim; • conservation achievements (water & biodiversity) are monitored & reported • BMS is perceived as essential to the long term success of the corporation • resources are dedicated over long term	Interviews: • Relationship manager; • SD management; • Operations managers; • Head of environment • Documents: • Relevant Holcim publications & annual reports;

Key Questions	Sub Questions	Illustrative Indicators	Data Sources/Methods
How relevant are the results of the agreement to the cement/aggregate sector as a whole?	• What is the relevance of the agreement to the broader cement/aggregate sector? • What tangible benefits does conservation bring to the sector as a whole? • To what extent has the agreement generated interests from other industry players? • To what extent are other producers developing comparable initiatives?	Extent to which others in the sector: • are aware of the agreement / efforts by Holcim to conserve water & biodiversity • agree to the need for joint action / change at the policy level • are making use of the tools & standards set by IUCN-Holcim	Interviews: • IUCN Env. Law Centre; • Holcim SD; • Cembureau; UEPG; CSI; FICEM (Cement and aggregate industry associations) • Documents: • Trade association publications
Effectiveness			
To what extent have IUCN-Holcim been successful in delivering against planned results?	To what extent have IUCN-Holcim been successful in implementing BMS: • in new operational sites? • in existing operational sites? • in all countries / regions in the world? • To what extent have IUCN-Holcim been effective in: • developing adaptable tools to support BMS? • building local capacities to implement BMS? • developing appropriate indicators to monitor progress?	• % of country/regional offices trained in the application of BMS • % of new operating sites governed by BMS • % of established sites retrofitted with BMS • % of countries / regions applying BMS • Degree to which BMS can readily be scaled-up / exported across regions, biomes, social-ecological conditions. • % of sites with appointed/trained staff • % of independent third-party observations corroborating evidence	Interviews: • Relationship managers; • Operations/site managers; • Holcim head of environment • Biodiversity Panel • IUCN Biodiversity/business • Document reviews: • Relevant Holcim publications & annual reports (e.g., BAP); • Monitoring data & panel review
	• To what extent are partners effective in developing robust policy guidelines to support biodiversity conservation and water management in the cement and aggregate sector? and for the integration of • To what extent is public policy enabling or affecting industry performance? • With a view of improving future outcomes, what lessons can we draw from this experience? • What is the perceived value of such a guide?	• Policy guidelines developed • Dissemination strategy developed • Degree to which policy guidelines are positively received by sector players an representatives	Interviews: • Relationship managers; • Steering Committee • IUCN: Bio/business, Water, Env. Law • Cembureau; UEPG; CSI; FICEM (Cement and aggregate industry associations)

Key Questions	Sub Questions	Illustrative Indicators	Data Sources/Methods
	• To what extent have IUCN-Holcim been effective in engaging the cement/aggregate sector in developing appropriate standards for biodiversity conservation/water management? • To what extent is the rest of the sector influenced by Holcim's implementation of the BMS? • What tangible products or services are applicable to the wider sector? What use has been made of these? • To what extent has the relationship helped improve biodiversity management in the sector? • What has changed in the sector since the onset of the Holcim-IUCN engagement?	• Degree to which sector players are aware of the agreement and its outcomes • Degree of adoption by others (along continuum from proposition/policy to practice / procedure); • Number of sector-wide publications • Extent to which biodiversity/water conservation are considered important by sector • % companies with resources dedicated to conservation / sustainability	Interviews: • Relationship managers; • IUCN: Bio/business, Water, Env. Law • Holcim: bio/water • Sector players / representatives • Association representatives • Document reviews: • IBAT • CSI performance indicators • Sector publications & annual reports
	• To what extent has the Holcim Group been effective in terms of strengthening water resource management? • To what extent have tools been developed to measure and mitigate water related risks? • To what extent are these likely to be operationalized within the near to mid-term future? • To what extent is the water management component supported by a clear dissemination strategy? Training programme? A monitoring and reporting framework?	• Degree to which water management tools have been developed • Degree to which water management tools have been operationalized • % of sites trained in water resource management • % of sites with water resource management plans • % reduction in water use in Holcim operations • % reduction in water contamination or ratio of improved water quality at discharge sites	Interviews: • Relationship managers; • Operations/site managers; • Holcim head of environment • IUCN Water • Holcim water • Document reviews: • Relevant Holcim publications & annual reports; • Monitoring data & independent audits

Key Questions	Sub Questions	Illustrative Indicators	Data Sources/Methods
Efficiency			
What are the costs and benefits of the relationship? How has efficiency increased over time?	• To what extent has Phase II been implemented within budget / estimated costs? • To what extent does Phase II represent a cost effective investment for Holcim? For IUCN? • What attempt has been made to monitor costs & benefits within Holcim? IUCN? • How is the relationship being leveraged to increase returns on investment for both partners? • What has changed as a result of this investment? • Are benefits greater than the costs of Phase II? • What, if anything, has been done: • To minimise the transaction / operational costs? • To improve benefits?	• Degree to which Phase II costs are monitored, reported and managed by both partners • Degree to which data on benefits are actively collated, reported and leveraged by both partners • Degree to which Phase II was implemented within budget • Positive ratio of actual versus planned costs • Degree to which stakeholders consider the value of the partnership to be a worthwhile investment	Interviews: • Relationship managers; • Operations/site managers • Senior management (IUCN/Holcim) • Secretariat members Document reviews: • Financial monitoring data • Holcim publications & annual reports • Workplans/worksheets
Impact			
To what extent is the relationship delivering real impacts in terms of: Biodiversity conservation? Water resource management?	To what extent has the relationship helped to set the conditions for achieving real impacts in terms of: • Biodiversity conservation? • Sustainable water resource use? • What evidence is there that current investments are leading towards such impacts? • What has changed in terms of site selection? Closure? & Restoration? • What efforts are being made to track & compare achievements?	• Degree to which monitoring data are considered reliable / valid by external experts (e.g., Panel on biodiversity) • Degree to which site selection, closure and restoration approaches have changed • Degree to which partnership is cited by IUCN/others for its achievements in terms of biodiversity & water conservation	Interviews: • Operations/site managers; • Holcim head of environment • IUCN Water • Biodiversity Panel • Document reviews: • Independent audits • PEPs • Panel Review Reports

Key Questions	Sub Questions	Illustrative Indicators	Data Sources/Methods
Sustainability			
To what extent are Phase II results (namely the application of BMS and water management) likely to become sustainable?	• To what extent are BMS and Water management considered essential to the success of the company? • How are BMS/Water management helping Holcim secure investments/demand for its products? • As currently applied, are the payoffs of BMS / water management investments worth the costs? • What incentive is there to pursue commitments? • To what extent are lessons learned being shared with others to improve biodiversity and water conservation? • Have internal/external policy guidelines been developed to support similar initiatives in the future? • Have operational guidelines been developed to support similar initiatives in the future? • Can innovations (products or services) be applied / transferred to other sectors / industries? • If the relationship was terminated after 7 years what would its legacy be? • To what extent has the relationship created enabling conditions within the sector to sustain long term impacts?	• Extent to which enabling conditions have been established • Extent to which sustainability investments are yielding returns on investment • Degree to which Holcim is able to capitalise on its sustainability investments to maintain or increase market shares • Extent to which biodiversity and water conservation are considered critical / non-negotiable values by Holcim senior managers, operational staff • Extent to which BMS and water management tools, methods and technologies can be scaled-up / self-replicated in the sector • Degree to which favourable policy environment has been created for others to engage in similar activities?	Interviews: • Relationship managers • Holcim senior management • Operations/site managers; • Holcim head of environment • IUCN Water & Bio/business • Biodiversity Panel • Representatives from aggregate associations • Document reviews: • Synthesis studies • other

Key Questions	Sub Questions	Illustrative Indicators	Data Sources/Methods
Factors Affecting Results			
What are the key internal / external factors affecting the achievement of results?	• How has the overall context within which the relationship evolved changed since 2011? • What are the key internal issues that have affected the ability of the both Partners to deliver on results? • To what extent have inter-institutional arrangements affected the results achieved by the two partners, in terms of: • Communication? Planning? Coordination? • How effective has the steering committee been in terms of directing the affairs of the partnership? • What are the key factors that support its effectiveness? • What, if any, are the key factors that affect its ability to support the achievement of results?	• Degree to both partners share the same vision / values relative to water management and biodiversity conservation • Degree to which mechanisms for dealing with disagreements are established • Frequency of interaction / communication between the two partners • Degree to which both partners collaborate effectively on policy and sector-wide approaches? • Degree to which steering committee members are trusted / supported by senior managers	Interviews: • Relationship managers • Holcim/IUCN senior management • Operations/site managers; • Holcim head of environment • IUCN Water & Bio/business
Future			
What lessons & recommendations can both partners draw from this experience? What are areas/topics for future collaboration between the two parties	• What if anything could be done to increase the likelihood of the relationship having a positive impact on biodiversity conservation? Sustainable water use? • What lessons have been learned? • What could be done differently? • How can IUCN use this experience to leverage improved partnerships with the private sector? • What could be done to increase the efficiency, effectiveness and impact of the IUCN-Holcim partnership? • What can the two partners do to support the scale-up of tools, methods and technologies developed during the agreement? • What should IUCN and Holcim do to leverage joint returns on their investment?		Interviews: • Relationship managers • Holcim/IUCN senior management • Operations/site managers; • Holcim head of environment • IUCN Water, Bio/business, & Env. Law • Panel on Biodiversity • Relationship secretariat

Appendix III Interview Protocols

Introduction

Phase II of the IUCN-Holcim relationship will come to an end in December 2013, and for internal learning and accountability purposes, IUCN contracted an independent consultant to evaluate the results and value of the relationship and programme so far.

The review has three main objectives:

1. Assess the extent to which the results of the Agreement have been fulfilled;
2. Identify lessons and provide IUCN with recommendations to improve future bilateral agreements with the private sector, in support of the IUCN Business Engagement Strategy;
3. Identify lessons and provide Holcim with recommendations to support implementation of biodiversity and water-related systems in their extractive operations.

Data collection for this review will be drawn from key stakeholder interviews and document reviews.

The information provided for this review will remain strictly confidential. The interview should take 40-50 min. In this document, bullet points should be viewed as prompts to solicit feedback.

Background information

- What is your current role and responsibilities
- What has been your involvement in the agreement between IUCN-Holcim to this day?

Relevance

For IUCN:

- What is the relevance of this agreement to the work of IUCN? How does it support the delivery of its mission?
  - What is the significance / importance of the agreement?
  - Have the terms of the agreement been used to improve IUCN's outreach to the business sector?
  - To what extent is the agreement aligned with the objectives of IUCN's Business and Biodiversity Programme and more specifically, the IUCN Business engagement Strategy?

For Holcim:

- How does the agreement support the interests of Holcim?
  - How does it support its business priorities? What benefits does Holcim derive from this?
  - How does the protection of biodiversity / conservation of water resources fit in the company's overall business strategy?
- What is the significance of this agreement for the broader cement/aggregate sector?

Effectiveness (for IUCN & Holcim)

BMS:

- To what extent have IUCN-Holcim been successful in implementing BMS?
  - Is progress being achieved as planned? Are there country/regional differences? Why?
  - What difference has the adoption of BMS made for the selection of new Holcim sites? For the management of existing sites?
  - What have been the main challenges encountered to date? What is being done to address these?
- What progress has been made in terms of building local capacities to implement BMS? Is the operational management of BMS decentralized?
- Have progress indicators been developed? Are these being used to monitor implementation or support decision-making? Any examples?

Policy:

- What progress has been made in terms of developing policy guidelines for improving biodiversity outcomes in the cement / aggregate sectors?

Sector-wide Strategy:

- How effective have IUCN-Holcim been in engaging the cement/aggregate sector to develop standards for biodiversity conservation/water management?
  - Are the agreement, and related products and services, generating interests from other industry players? Are agreement outputs being marketed to a broader audience?
  - Are there tangible signs that change is occurring within the sector? Are other producers developing / implementing similar initiatives?

Water Management:

- In terms of water management, what progress has been achieved?
  - What is the current level of implementation? What has been achieved to date?
  - Are operating sites able to implement / monitor water use and quality?
  - What are the key issues that remain to be addressed?

Efficiency

All stakeholders

- In your opinion, was this a worthwhile investment? Why?
- What benefits did Holcim/IUCN draw from the agreement? Could resources have been better invested?
- To what extent is the relationship being leveraged to increase returns on investment?

Relationship Managers:

- To what extent are the costs of the agreement manageable? Has Phase II been implemented within budget / estimated costs?
  - Were costs and benefits monitored over time?
  - What, if anything, has been done to minimise costs (transaction or operational)?

Factors

Relationship Managers:

- How has the overall context within which the relationship evolved changed since 2011?
- What are the key factors (internal / external) that have affected the achievement of results?
- To what extent have inter-institutional arrangements been effective in terms of Communication? Planning? Coordination?
- How effective has the steering committee been in terms of directing the affairs of the partnership? (i.e., managing organisational cultures, setting direction, providing sufficient resources, making decisions…)

Relationship Managers & Steering Committee Members:

- What are the key strengths of the SC?
- What, if any, are the challenges it faces in delivering agreement objectives?
- To what extent do you feel its decisions were upheld / supported by both organisations?

Impact

- To what extent has the relationship been effective in setting the conditions for achieving real impacts in terms of Biodiversity conservation? Sustainable water resource use?
- What evidence is there that current investments are leading towards improved biodiversity / water use outcomes?
  - What has changed in terms of site selection? Closure? Restoration?
  - What efforts are being made to track & compare achievements?

Sustainability

- To what extent are BMS and Water management considered essential to the long term success of Holcim?
  - Is the organisational culture of Holcim aligned with the principles of the agreement? What incentives are there to pursue commitments? Have clear policy guidelines been established?
  - How are these efforts helping Holcim secure investments/demand for its products? Are benefits worth the costs?

- If the relationship was terminated after 7 years what would be its legacy?
  - What steps have been taken to ensure that relationship results are sustained over the long term?
  - Have enabling conditions been created within the sector to support sustainability investments?

Future

- What lessons can IUCN / Holcim draw from this experience?
- What should be done to ensure that the agreement has a lasting effect on biodiversity conservation? Sustainable water use? The cement / aggregate sector as a whole?
  - What can the two organisations do to support the scale-up of tools, methods and technologies developed during the agreement?
  - What should IUCN and Holcim do to leverage further returns on their investment?
- If the relationship were to continue, what should be the focus of a renewed engagement?
- How could the two organisations improve their relationship? Their impact on biodiversity conservation and water resource management? Their outreach to the broader extractive industries?

For IUCN:

- How can IUCN use this experience to leverage improved partnerships with the private sector?

Conclusion

- Is there anything else we have not discussed but would be important to note or consider?

Appendix IV List of Stakeholders Interviewed

Name	Title/Position	Role/Relationship	Affiliation
Ruksana Mirza	Head, Sustainable Development	SC member	Holcim Technology Ltd.
Domique Büchi	Head of Environment	SC member	Holcim Technology Ltd.
Rashila Kerai	Biodiversity Programme Manager	Relationship Manager	Holcim Technology Ltd.
Meg Garakani		Holcim water focal point	Holcim Technology Ltd.
Benedikt Vonnegut	CEO of Holcim Lebanon	Key informant/ex-SC member	Holcim Ltd.
David Kingma	Manager SD Coordination and Reporting	Key Informant	Holcim Technology Ltd.
Tanya Strevens	Associate, Cement Sustainability Initiative	Key Informant – Sector	World Business Council for Sustainable Development
Yvonne Leung	Manager, Cement Sustainability Initiative	Key Informant – Sector	World Business Council for Sustainable Development
Catherine Goyer	Directrice Environnement	Key Informant	Demix/Holcim Ltd.
Yves Lapointe	Surintendant entretien – Région Québec/Estrie	Key Informant	Demix/Holcim Ltd.
Oepoyo Prakoso	Corporate Environment & Compliance Dept.	Key Informant	PT Holcim Indonesia Tbk
Daniela Beles	Environmental Coordinator – Emerging Europe	Key Informant	Holcim Emerging Europe
Joel Nickel	Environmental Coordinator – United States	Key Informant	Aggregate Industries US
Giulia Carbone	Deputy Head – Global Business and Biodiversity Programme	SC Member	IUCN
Alejandro Iza	Head, Environmental Law Programme	Policy Focal Point/SC Member	IUCN/Environmental Law Centre
Mark Smith	Director, Global Water Programme	SC Member	IUCN
James Dalton	Coordinator, Global Initiatives & Global Water Programme	Water focal point	IUCN
Stefano Barchiesi	Project Officer, Water Programme	Water initiative	IUCN
Rebecca Welling	Project Officer, Water Programme	Water initiative	IUCN
Sarah Lucas	Legal Officer, Environmental Law Centre	Policy	IUCN/Environmental Law Centre
Christoph Imboden	Chair, Biodiversity Advisory Panel	BMS/BIRS	IUCN

Name	Title/Position	Role/Relationship	Affiliation
Peter-John Meynell	Member, Biodiversity Advisory Panel	BMS/BIRS	IUCN
David Richards	Member, Biodiversity Advisory Panel	BMS/BIRS	IUCN
Marc Stalmans	Member, Biodiversity Advisory Panel	BMS/BIRS	IUCN
Gerard Bos	Head, Global Business and Biodiversity Programme	Key Informant	IUCN
Maria Ana Borges	Relationship Manager – Business and Biodiversity Programme	Key Informant – Manager	IUCN
Alex Moiseev	Head, Planning, Monitoring and Evaluation	Key Informant	IUCN
Julia Marton-Lefevre	Director General	Key Informant	IUCN
Stewart McGinnis	Head, Global Programme & Nature Based-Solutions	Key Informant	IUCN

Appendix V IUCN's Evolving Relation to Business

With a global reach that stretches to over 1200 members (governmental and non-governmental organisations) and some 11 000 scientific experts in 160 countries, IUCN has grown substantially since its founding in 1948.[24] Yet to this day, incursions into the business world have been few. While no less than 300 resolutions related to business activities[25] have been adopted over the years, movement towards greater collaboration with the sector has been slow, due to member opposition. Nevertheless, the critical mass of stakeholders who see the necessity of engaging business, if long-term conservation impacts are to be achieved, has steadily grown, and with this change of perception has come a renewed willingness to leverage IUCN's convening authority to improve biodiversity conservation across the spectrum of human-environment interactions. The following table details the key events that have shaped IUCN's evolving relationship with business.

The Evolution of IUCN's Engagement with the Private Sector

1996	**1st World Conservation Congress: A Call for Change** Adoption of Resolution 1.81, during the Montreal Congress, marks the beginning of IUCN's efforts to engage the private sector. It encouraged the Union to develop a "comprehensive approach to engaging the business sector" in a bid to enhance dialogue and generate financial support for the commissions.[26] To this end, the Secretariat creates the Economics Programme, which would later become the Business Unit (in 2000) and the Business and Biodiversity Programme, as it is known today. The Private Sector Task Force is established by Council to help operationalize private sector engagement within IUCN.[27]
1999	**Developing the Private Sector Engagement Process** Guidelines for IUCN Engagement with the Private Sector are established, outlining the Union's principles of cooperation and criteria for selecting activities and partners "in a structured and strategic way." [28] Its main objectives and purpose were to enhance dialogue with the private sector and help businesses develop conservation strategies.
2000	**2nd World Conservation Congress: Reaching out to the Private Sector** The Amman Congress marks the beginning of IUCN's current approach to private sector engagement. While continuing to seek grants and sponsorships to fund activities, a strategic move is made to provide technical assistance on environmental issues and act as a convener to discuss sector-wide concerns (e.g. IUCN-ICMM Dialogue on Mining and Biodiversity).[29] To support this renewed mandate vis-à-vis the private sector, the Secretariat is tasked with the development of a strategy and action plan (Council Decision C/51/39).[30] During the same year, IUCN began collaborating on some initiatives and projects with Shell, a large-footprint industry. Their first official Agreement would only be signed in 2007.
2003	**Internal Reflection and Change** IUCN conducts a thorough review of its policies and experiences related to the private sector. To further institutionalise its engagement, IUCN creates the Business and Biodiversity Programme.[31]

[24] http://www.iucn.org/about/union/members/
[25] *IUCN Business Engagement Strategy,* Version 2.0, p. 4.
[26] Ibid.
[27] *IUCN Engagement with the Private Sector: Rationale and Purpose*, p. 2.
[28] *Guidelines for IUCN Engagement with the Private Sector*, p. 1.
[29] Ibid, p. 6.
[30] *IUCN Engagement with the Private Sector: Rationale and Purpose*, p. 2.
[31] http://www.iucn.org/about/work/programmes/business/bbp_aboutus/

2004	**The First Private Sector Engagement Strategy** Building on the results of the 2003 evaluation, the first comprehensive Private Sector Engagement Strategy is developed for 2005-2008, in response to Council Decisions C/58/41 and C/60/58.[32] Designed "to launch and test a new approach to conservation by building engagements with the business sector," the strategy recognises that important conservation challenges and opportunities are linked to private sector investments and points to business engagement as a means of furthering the Union's mission and the establishment of a more sustainable economy.[33] Acknowledging the widespread scepticism of IUCN's membership, emphasis is placed on the importance of preserving the Union's goals, policies, credibility and autonomy, as ties to the private sector are developed, and the need to carefully plan, monitor and evaluate activities. To wit, the very definition of "engagement" set out by this version referred to "substantive interaction between IUCN and the private sector which seeks to influence the behaviour of business in ways that contribute to the IUCN Mission."[34] With regards to results, the strategy assumes that internal capacity building efforts and increased collaboration efforts will lead to (i) a conservation community that is more informed about market mechanisms and understands their potential and limitations to achieve biodiversity conservation; (ii) a more accountable private sector that contributes to sustainable development including conservation and social equity; and (iii) effective dialogue and collaboration between IUCN and the private sector, which helps to achieve conservation through, and alongside, sustainable development.
Nov. 2004	**3rd World Conservation Congress: Expanding on the Strategy** Resolutions 3.060 and 3.061 are adopted during the Bangkok Congress to provide further direction to the Union's private sector engagement, pointing to the need for clearer guidelines.
2006	**Steps toward Operationalizing the Strategy** Operational Guidelines for Private Sector Engagement are published to help implement the Private Sector Strategy and address associated risks (e.g. credibility, reputation, financial losses, compromised conservation benefits, etc.). The guidelines further specifies (though briefly) the need to promote Free, Prior and Informed Consent (FPIC), integrate human rights and well-being considerations, and point to the need for corporate commitment and the maintenance of IUCN's independence.[35] To safeguard IUCN's interests, the Guidelines stress the importance of setting clear objectives, selecting appropriate partners, managing risks and fostering sustaining relationships. The document emphasises the fact that IUCN will also need to adjust its own internal practices and operations if it is to respect its policy on Corporate Social Responsibility.
2007	**Phase 1 of the IUCN-Holcim Agreement** The Agreement seeks to build a lasting relationship to develop robust ecosystem conservation standards for the Holcim Group, and further contribute to sector-wide improvements. Specific objectives include (i) the development of a corporate biodiversity policy and strategy for Holcim; (ii) the exploration, identification and development of joint initiatives; and (iii) the sharing of lessons learned with the wider industry and conservation communities.

[32] *Part of the Solution – Business, Biodiversity and Sustainable Development: A Strategy for Enhancing IUCN's Interaction with the Private Sector*
[33] *Part of the Solution – Business, Biodiversity and Sustainable Development: A Strategy for Enhancing IUCN's Interaction with the Private Sector*, Version 1.0, pp. 1-3.
[34] Ibid., p. 2.
[35] *Operational Guidelines for Private Sector Engagement*, Version 1.0, p. 9.

May 2008	**An Evolving Rationale for Engaging with the Private Sector** The year 2008 marks a definite turning point in terms of IUCN's engagement with the private sector. The change of perspectives is unequivocal: "economic development which disregards nature conservation is self-defeating, that conservation and profits are not mutually exclusive but may include trade-offs and that, without a strongly-committed partnership with the private sector, we will struggle to achieve the targets we have set for human well-being or biodiversity. Through constructive interaction with business, IUCN can help society in making better-informed choices."[36] If up to this point, emphasis was placed on ensuring that private sector partnerships were aligned with the Union's mission and objectives, it now recognised that it would not achieve its mission without the help of business. To maintain clear accountability, distinctions were drawn between the unit responsible for coordinating private sector engagement (the Business and Biodiversity Programme) and the group responsible for corporate funding (the Strategic Partnerships Unit).
Dec. 2008	**Feedback on the Operationalization of Engagement** A review of the Operational Guidelines for Private Sector Engagement leads to the conclusion that in order to be useful, IUCN's approach needs to be simplified, the purpose of guidelines clarified, and monitoring and evaluation mechanisms strengthened.[37] The absence of a clear Theory of Change for private sector engagement was indirectly sited with the suggestion that IUCN needs to clarify institutional objectives and outcomes,[38] and improve procedures and processes for responding to the private sector, including internal due diligence measures.[39]
2008-2009	**4th World Conservation Congress: Improving Business Engagement** In response to Resolution 4.086 of the Barcelona Congress, and the findings from the staff review, Operational Guidelines are revised and adopted by Council at its 72nd meeting, in February of 2009. Revisions help clarify the notions of transparency, participation and FPIC, as well as the process of operationalizing engagement. Stated purposes of the document include both "delivering programmatic results and for fundraising (sponsorship and licensing)," as well as to "ensure engagements align with the Private Sector Strategy and help the user navigate other relevant IUCN policies and procedures."[40] Guidelines reiterate IUCN's value proposition (comparative advantage), first articulated in the strategic vision document "A 2020 Vision for IUCN." IUCN's comparative advantage is defined in terms of (i) credible, trusted knowledge; (ii) convening power; (iii) local-global/global-local reach; and (iv) regulatory influence.
2010	**Application of Staff Feedback and Expansion of Internal Resources** A Companion Handbook to clarify business engagement processes is created in response to the 2008 staff review, providing further evidence of Union's increasing rigour and capacity to work with the private sector. The handbook identifies different engagement activities and mechanisms, highlights potential risks, articulates the purpose and procedures for due diligence, provides negotiation tips, and identifies the key drivers of business engagement. Finally, it underscores the risks of declining ecosystems for businesses, explicitly linking the private sector with biodiversity – arguments that would later be integrated in the 2012 Engagement Strategy. IUCN signs a five-year agreement with Nespresso to further the sustainability of its aluminium value-chain and "explore new business models… to minimize Nespresso's footprint on the environment."[41] IUCN signs a three-year agreement with Rio Tinto towards the adoption of more sustainable practices and by means of reciprocity, help IUCN better understand the challenges of conservation in the resources sector.[42]

[36] *IUCN Engagement with the Private Sector: Rationale and Purpose*, p. 1.
[37] *Review of the Application of IUCN's* Operational Guidelines for Private Sector Engagement, p. 2.
[38] Ibid., p. 9.
[39] Ibid., pp. 10, 19.
[40] Ibid., p. 7.
[41] http://www.iucn.org/about/work/programmes/business/bbp_work/by_engagement/nespresso/
[42] http://www.iucn.org/about/work/programmes/business/bbp_work/by_engagement/rio_tinto/

	Phase II of the IUCN-Holcim Engagement Begins
Feb. 2011	Following the first phase of collaboration and after reviewing areas of success and improvement in their partnership, IUCN and Holcim set out the terms of a new agreement (2011-2013) focused on implementing the Biodiversity Management System.
	A New Draft Business Engagement Strategy is Presented to Council
Feb. 2012	Following a request from the Private Sector Task Force,[43] a revised strategy is developed and submitted to Council. After many years of reflection, there now is a strong sense that IUCN has "a better understanding of the risks and opportunities posed by such interactions and the resources required to implement these engagements. In addition, IUCN knows where it is best placed to add value to, and complement, the work of its Members."[44] One of the ways it adds value is by providing information on biodiversity and ecosystems that can help inform private sector decision-making and policy development.[45] Characterised as "an effective One Programme Approach," that is "strongly aligned with the IUCN Programme 2013-2016,"[46] the revised strategy aims to provide a unified approach that is to be implemented by the Union as a whole, as opposed to only the Business and Biodiversity Programme. The Strategy builds on the input of the private sector and includes detailed explanations of why IUCN should collaborate with the private sector, a rationale that was conspicuously absent in previous documents. The draft Strategy further suggests that work with business associations would likely generate more impact – a "multiplier effect" – compared with individual arrangements.[47] The Programme and Policy Committee of Council highlights the need to clarify the means of collaboration and implementation, as well as the key assumptions that underlie the Union's approach, including its convening power and technical knowledge that are intended to drive private sector engagement forward.[48]
	End of IUCN's first Five-Year Agreement with Shell
	The 2007-2012 Agreement with Shell comes to an end, an effort designed to raise biodiversity performance standards in the energy sector and supply chain. Drawing on the findings of the 2012 Review, Shell and IUCN negotiate the terms of a new agreement focused on developing multi-stakeholder dialogue platforms. The terms of the new agreement are under review in 2013.[49]

[43] *IUCN Business Engagement Strategy,* Version 2.0, p. 4.
[44] *IUCN Business Engagement Strategy,* Version 2.0, p. 4.
[45] *Our Planet Needs Solutions – IUCN, the global union for a sustainable future,* pp. 2, 5.
[46] *78th Meeting of the IUCN Council – Extract from Summary Minutes*.
[47] Ibid.
[48] *57th Meeting of the Bureau of Council – Extract from Summary Minutes*.
[49] http://www.iucn.org/about/work/programmes/business/bbp_work/by_engagement/bbp_shell/

April 2012	**Revision and Adoption of the Business Engagement Strategy** The second Business Engagement Strategy reflects the many important changes that took place since 2004. While the first Strategy seemed primarily concerned with mitigating IUCN's exposure to risk (i.e. autonomy, reputation and credibility), "risk" in the revised strategy primarily lies with *businesses not recognising the importance of these links*. IUCN's capacity to minimise such risks by improving conservation outcomes lies at the heart of the revised approach.[50] Likewise, the private sector's "knowledge of markets, [its] ability to harness advanced research and development to deliver solutions and management experience can be valuable assets when applied to conservation."[51] Version 2.0 of the Strategy also integrates the need to consider human wellbeing, and broadens its scope to place emphasis on emerging economies.[52] Overall, the revised strategy is more holistic, both in terms of the Union's implementation strategy (inclusive of all global thematic and regional programmes) and the private sector partners it targets (sectors with strong risk, such as agriculture, forestry, tourism, pharmaceuticals, finance and retail).[53]
2013	**Looking Ahead: The Way Forward for IUCN's Private Sector Engagement** At the 81st IUCN Council meeting, it was decided that the task forces for private sector engagement would continue their activities until 2016, when a review would be conducted.[54] For the first time in IUCN's history, no motion against private sector engagement had been presented during a Conservation Congress (Jeju, 2012). The purpose of the Private Sector Task Force is to "promote and monitor the implementation and effectiveness of IUCN's Business Engagement Strategy […] and provide policy insight to Council on risks and opportunities related to business operations on biodiversity conservation and sustainable development."

Bibliography

- Duncan, E. & Bertrand, N. (2008). Review of the Application of IUCN's Operational Guidelines for Private Sector Engagement, 25 p.
- International Union for Conservation of Nature. (2013). Excerpts from the Summary Minutes of the 81st Council Meeting (January 2013).
  - (2013). 60th Meeting of the Bureau of Council – Agenda Item 4: Terms of Reference and Membership of Council Task Forces.
  - (2013). IUCN Council's Task Force on the Implementation of the 2012 Congress Resolutions – Terms of Reference 2013-2016, Version 7 May 2013.
  - (2013). IUCN Council's Private Sector Task Force – Terms of Reference 2013-2016, Version 13 June 2013.
  - (2012). IUCN Business Engagement Strategy, Version 2.0, 21 p.
  - (2012, March 23). 57th Meeting of the Bureau of Council – Extract from Summary Minutes.
  - (2012, February 12-15). 78th Meeting of the IUCN Council – Extract from Summary Minutes.
  - (2012, February 13). Report of the 33rd Meeting of the Programme and Policy Committee of Council.

[50] *IUCN Business Engagement Strategy,* Version 2.0, pp. 9, 12.
[51] Ibid., p. 5.
[52] Ibid., pp. 6, 20.
[53] Ibid., pp. 11, 12.
[54] *IUCN Council's Private Sector Task Force – Terms of Reference 2013-2016, Version 13 June 2013.*

  - (2012). Our Planet Needs Solutions – IUCN, the global union for a sustainable future, 8 p.
  - (2010). Operational Guidelines for Private Sector Engagement – Companion Handbook, 59 p.
  - (2009). Operational Guidelines for Private Sector Engagement, Version 2.0, 17 p.
  - (2008). IUCN Engagement with the Private Sector: Rationale and Purpose, 4 p.
  - (2006). Operational Guidelines for Private Sector Engagement, Version 1.0, 40 p.
  - (2004). Part of the Solution – Business, Biodiversity and Sustainable Development: A Strategy for Enhancing IUCN's Interaction with the Private Sector, Version 1.0, 17 p.
  - (1999). Guidelines for IUCN Engagement with the Private Sector, 3 p.
- International Union for Conservation of Nature & Holcim. (2011). *Programme Agreement*, 12 p.
- Turner, S. (2010). IUCN-Holcim Agreement – Management Response to External Review, 7 p.

Sitography

- IUCN. (2013). IUCN-Nespresso Engagement. Consulted online 07/09/2013 at: http://www.iucn.org/about/work/programmes/business/bbp_work/by_engagement/nespresso/
- IUCN. (2013). IUCN-Tio Tinto Engagement. Consulted online 07/09/2013 at: http://www.iucn.org/about/work/programmes/business/bbp_work/by_engagement/rio_tinto/
- IUCN. (2013). IUCN-Shell Engagement. Consulted online 07/09/2013 at: http://www.iucn.org/about/work/programmes/business/bbp_work/by_engagement/bbp_shell/

Appendix VI Holcim's Environmental Commitments

Established in 1912 in Switzerland, under the name Holderbank, the Holcim Group Ltd. has since grown to become one of the largest and most important producers of cement and aggregates in the world, with 80 000 employees working in approximately 70 countries. While the company has produced cement since its early operations, it now offers ready-mix concrete, concrete products and asphalt, among others.[55]

For the past two decades, the Holcim Group has taken a leading role in environmental protection and resource management, proposing innovative solutions, contributing to knowledge creation and dissemination, and influencing sector standards and policies. From quarry rehabilitation in Canada to butterfly gardens in the Philippines, Holcim continues to demonstrate its commitment to creating a cleaner and more sustainable cement and aggregate sector. The following tables provide an overview of Holcim's evolving understanding of effective environmental management.

The Evolution of Holcim's Environmental Commitments

1990s	**Integrating Sustainability in Daily Business Practices** Holcim becomes increasingly committed to strengthening its environmental performance. It integrates environmental concerns in its business strategy and signs the International Chamber of Commerce "Business Charter for Sustainable Development." Progressive in its overall approach, it seeks to reduce its carbon emissions, combine resource conservation with sustainable economic growth, and develop environmentally friendly products. Outside of Switzerland, Holcim establishes innovative practices such as in Belgium, where it becomes a leader in the use of alternative fuels for cement kilns. Holcim's commitment to sustainability is reaffirmed in 1999 when it joins the World Business Council for Sustainable Development.[56]
2001	**First Version of Holcim's Current Environmental Policy** The first version of Holcim's current Environmental Policy is adopted in 2001. Today's version, most recently revised in 2011, is structured around four main pillars (management systems; resource utilisation; impacts; and stakeholder relations). Notably, the Policy requires all Holcim Group companies to fully integrate the proposed list of 14 mandatory directives and tools for ensuring coherence in the policy's implementation.[57]
2003	**A Foundation for Construction Sector Sustainability** Holcim takes its commitment a step further by creating the Holcim Foundation for Sustainable Construction. Through this Initiative, the company fosters discussion and knowledge sharing around environmental sustainability in the sector.[58]
2004	**Clarifying Employee Environmental Responsibilities** Holcim launches its Code of Conduct for employees, which underscored the importance of Environmental Protection as an organisation-wide priority.[59]

[55] *Annual Report 2010 Holcim Ltd.*, p. 3.
[56] Flammer, D. (2012). *Holcim Chronology – A Story in 10 Chapters*, pp. 49, 67.
[57] [Revised] *Holcim Environmental Policy*, 7 p.
[58] Holcim. (2010). *Annual Report 2010 Holcim Ltd.*, p. 25.
[59] http://www.holcim.com/sustainable-development/vision-and-strategy.html

	Measures of Success
2005	Holcim is registered in the Dow Jones Sustainability World Index and has maintained its status ever since as one of the most sustainable companies in its sector. It is also on the FTSE4Good sustainability index.[60]
	Holcim and IUCN Sign Agreement
2007	Holcim and IUCN join forces to increase biodiversity conservation. The agreement leads to the creation of the Biodiversity Management System and an agreement to extend the relationship for another three years, in 2011.[61]
	Successful Contributions to Knowledge and Practice
2010	In honour of the International Year of Biodiversity, Holcim provides extensive coverage of its commitment to sustainability and conservation in its 2010 Annual Report. While the report establishes clear linkages between threats to biodiversity and extractive industries, it concludes that conservation and site rehabilitation efforts can generate beneficial outcomes for the environment and industry alike. To wit, two of the five pillars of Holcim's value creation, outlined in this report, are corporate social responsibility and sustainable environment performance standards. In the words of IUCN, "Holcim has been very transparent and flexible, which has made for a highly constructive working relationship. This openness has also meant that we have been able to take advantage of new opportunities, such as Holcim's participation in the major global study on The Economics of Ecosystems and Biodiversity (TEEB)."[62] Holcim initiates work in the area of biodiversity and water, via the Cement Sustainability Initiative of the World Business Council for Sustainable Development, but goes even further on some other issues. In addition to developing a new formula for concrete (Holcim Optimo), that cuts CO2 emissions, Holcim partners with different groups like Nanocem to stay ahead of the curve and contribute to the development of innovative sustainable practices and technologies. Between 1990 and 2010, the company reduced its CO2 emissions by 20%.[63]
	Key Guiding Documents are Published The *Biodiversity Directive* reiterates the Group's commitment to safeguarding biodiversity, adding that conservation "will create long-term added value" for the corporation.[64] The *Quarry Rehabilitation Directive* sets out nine mandatory rules and steps to follow when leaving a quarry site, including consideration of the needs of local communities, leaving a clean environment, engaging with stakeholders, reporting obligations, and efforts to *enhance* biodiversity.[65]
2011	The *Corporate Sustainable Development Report* highlights how biodiversity conservation now permeates the organisation's culture, deeming it a source of pride for employees and a way in which the company attracts and retains good talent. The document reflects Holcim's commitment to sustainability and the importance of effective partnerships: "[t]he long-term nature of the business makes a commitment to SD fundamental. Not only does the company have a significant environmental footprint, which society expects us to minimize, but we also have a presence in our host communities for decades. It is thus vital that we address all elements of the triple bottom line and have strong relationships with communities and other stakeholder groups."[66] The *Site Biodiversity Management Recommendation – Guidance Document* outlines the importance of long-term strategic thinking by incorporating biodiversity and rehabilitation concerns at the earliest stages of site planning.[67]

[60] *Annual Report 2010 Holcim Ltd.*
[61] Ibid., p. 12.
[62] Ibid., p. 15.
[63] Ibid., p. 42.
[64] *Holcim Biodiversity Directive*, 8 p.
[65] *Quarry Rehabilitation Directive 2011*, 9 p.
[66] *Corporate Sustainable Development Report 2011*, pp. 4-5.
[67] *Site Biodiversity Management Recommendation – Guidance Document*, p. 3.

2012	**Encouraging Statistics on Progress** Data on Holcim's 2012 activities reveals increased environmental investments and provisions for site restoration, since 2010 (37 to 42 CHF million and 617 to 843 CHF million, respectively). It also shows that cases of non-compliance had decreased and that the number of biodiversity-sensitive sites (specifically for cement) had doubled since 2010.[68] The Holcim Water directive, which sets a 20% reduction target by 2020, is established.
2013	**The Way Forward** Holcim's internal structure continues to reflect its commitment to environment. Internally, two main committees work on biodiversity and sustainability: the Sustainable Development Steering Committee, as well as another committee that advises on the design and implementation of sustainable development programmes.[69] Despite its excellent reputation for its work in environment, Holcim recognises that more awareness is needed to reach its targets in biodiversity and water management. It perceives its participation in key dialogues (i.e. the IUCN World Conservation Congress and the Conference of Parties of the Convention on Biological Diversity) as important venues for sharing its approach and positions.[70]

Bibliography

- Flammer, D. (2012). Holcim Chronology – A Story in 10 Chapters, 91 p.
- Holcim. (2013). SD Committee Meeting 2013, Environment – Update on the IUCN Partnership, 4 p.
  - (2013). Memo to Alain Frechette – Holcim inputs into CSI – Influence the Sector, 1 p.
  - (2012). Performance Data 2012, 6 p.
  - (2011). Site Biodiversity Management Recommendation – Guidance Document, 16 p.
  - (2011). Quarry Rehabilitation Directive 2011, 9 p.
  - (2011). Holcim Biodiversity Directive, 8 p.
  - (2011). [Revised] Holcim Environmental Policy, 7 p.
  - (2011). Corporate Sustainable Development Report 2011, 44 p.
  - (2010). Annual Report 2010 Holcim Ltd., 222 p.

Sitography

- Holcim. (2013). *Vision and Strategy*. Consulted on 09/09/2013 at: http://www.holcim.com/sustainable-development/vision-and-strategy.html

[68] *Performance Data 2012*, 6 p.
[69] http://www.holcim.com/sustainable-development/vision-and-strategy.html
[70] *SD Committee Meeting 2013, Environment – Update on the IUCN Partnership,* 4 p.

Appendix VII IUCN Business Engagement Strategy

The purpose of the following table is to demonstrate the evolution of the IUCN's Private Sector Engagement Strategy by comparing key elements from its implicit business engagement Theory of Change. Each element is drawn from four key documents that marked the evolving thinking about business engagement (i.e. the *2004 Private Sector Strategy*, the *2008 IUCN Engagement with the Private Sector Rationale and Purpose*; the *2009 Operation Guidelines* and the *2012 Private Sector Strategy*).

The eight years between the first and second versions of the Strategy allowed for a great deal of reflection on and refinement of the purpose, rationale, and objectives of engaging with the private sector. While IUCN's engagement with the private sector still does not rest on an explicit Theory of Change, the revised Strategy developed a clearer set of outcomes ("Entry Points") and a desired impact that is more focused on the private sector. Outcome 3 (the improvement of regulatory environments related to the preservation of biodiversity), for example, is new to this version of the strategy.

The Development of IUCN's Private Sector Engagement Strategy

	2004 Private Sector Strategy	2008 Rationale and Purpose; 2009 Operational Guidelines	2012 Private Sector Strategy
Value added/ Value proposition (Assumptions)	IUCN Value Added: • Unique membership of governments and non-governmental organisations; • Global networks; • Capacity to convene and build consensus; • Scientific credibility • Information and biodiversity assessment, and natural resource policy; and • Ability to link conservation practice with national and international policy (p. 6).	IUCN Value Proposition: • IUCN provides credible, trusted knowledge; • IUCN convenes and builds partnerships for action; • IUCN has a global-to-local and local-to-global reach; • IUCN influences standards and practices (2009, p. 6).	Working assumptions: • IUCN will pursue change agendas with key business players at the global and local levels; • IUCN will call for change at the landscape or seascape level; • IUCN will use its convening power to organise and facilitate dialogues that improve understanding, build trust, close knowledge gaps and identify opportunities for progress; • IUCN will provide evidence that will contribute to the integration of biodiversity into business operations. • IUCN will support business leaders, in companies and associations, who are committed to transformational changes (p. 11).

	2004 Private Sector Strategy	2008 Rationale and Purpose; 2009 Operational Guidelines	2012 Private Sector Strategy
Inputs	• Developing case studies, guidelines and training material; • Providing technical services and advice; • Convening debate and discussion around key business and environment issues; • Collaborating with industry to influence intergovernmental processes; • Joint conservation and sustainable use activities; • Advice, publications and training (pp. 6-7).	Not reiterated (no explicit change).	• Adopt, adapt and create tools and approaches; • Provide expert guidance on conservation issues at the local, regional and global level; • Establish engaging and trusted platforms for discussion with other interest groups (p. 13).
Outputs	• Company-level biodiversity policy, including impact assessment and management; • Integrating biodiversity in private investment decisions; and • Crafting efficient national and global environmental policies (p. 7).	Not reiterated (no explicit change).	• Shared visions around conservation and business issues; • Tools and approaches to bridge the knowledge and trust gap (conservation community and private sector) (pp. 4-5); • Knowledge products and scientific evidence, p. 4; • Increased internal awareness, p. 20.
Intermediate Outcomes	N/A	• Improve public and corporate policies and standards; • Enhance stakeholders' capacities for implementing business and biodiversity policies and standards; and • Increase mutual trust and engagement among stakeholders (2008, p. 3).	• Engage with a few selected leaders in priority sectors to develop or adapt, field test and pilot new tools and other best practice approaches; • Build on best practice experiences and other available evidence; • Direct engagement with public policy and the financial sector in order to send clear regulatory and investment signals to entire business sectors (p. 12).

	2004 Private Sector Strategy	2008 Rationale and Purpose; 2009 Operational Guidelines	2012 Private Sector Strategy
Long-term Outcomes	• A conservation community that is well informed about market mechanisms and understands their potential and limitations to achieve biodiversity conservation. • A more accountable private sector which contributes to sustainable development including conservation and social equity. • Effective dialogue and collaboration between IUCN and the private sector which helps to achieve conservation through, and alongside, sustainable development (2004, p. 8)		• Businesses adopt policies to manage biodiversity risks so as to avoid and minimise biodiversity impacts and seek opportunities for biodiversity conservation and benefits for natural resource-dependent people. • Supply chains apply sustainability standards and safeguards that positively impact biodiversity and local livelihoods. • Public and financial sector policies promote the integration of biodiversity and livelihood values in business decision-making (p. 9).
Impacts	• A sustainable global economy in which businesses are committed and effective partners in achieving a just world that values and conserves nature (2004, p. 3).		• Business practices at landscape and seascape levels are transformed to generate benefits for biodiversity and natural resource-dependent livelihoods (p. 9).