

Working Group Paper Nr.89 (2014)
IMIA Conference in Cannes Mandelieu - 20 to 24th September 2014

**Sustainability aspects in engineering underwriting and corporate
responsibility for insurance and reinsurance companies**



Prepared by: Holger Hillebrand, Partner Re (Chairman)
Lionel Kpoze, SCOR;
Stefan Meyer, Swiss Re
Nicholas Newlove, RSA
Marcus Weber, Munich Re
Christoph Hoch, Munich Re (Sponsor)

Table of contents

- Table of contents 2
- Introduction 3**
- 1 Descriptions and definitions 4**
 - 1.1 History and recent developments 4
 - 1.2 Stakeholder concept and corporate social responsibility (CSR) 5
 - 1.3 Principles for Sustainable Insurance (PSI), UNEP 8
 - 1.4 Environmental, social and corporate governance (ESG)..... 8
- 2 ESG concerns in engineering insurance business 9**
 - 2.1 Hydropower projects 10
 - 2.2 Mining projects 11
 - 2.3 Oil and gas projects..... 11
 - 2.4 Thermal power plants..... 12
- 3 Possible ways of integrating ESG principles into the underwriting process..... 13**
 - 3.1 ESG: assessment and management 13
 - Awareness:..... 14
 - Method of assessment..... 14
 - Risk appetite / Tolerance level 14
 - Guidelines / Tools..... 15
 - Consistency / Transparency 15
 - 3.2 ESG framework in engineering underwriting 16
 - 3.2.1 Tolerance level / Risk appetite 17
 - 3.2.2 Due diligence process 19
 - 3.2.3 Decisions / Communication 20
- 4 Appendices 22**
- Appendix 1: Issues addressed in ESIA analyses 22**

Introduction

Corporate social responsibility is increasingly coming under the critical eye of a watchful public and only few underwriting aspects are more tangled and confusing than those related topics. The underwriting of construction risks is one element in a decision-making process when projects are being realised. The realisation of large construction projects is often considered from different angles, as these can have a significant impact on the environment and the society. An underwriter's decision to support a particular construction risk involving an arguable or disputed project can consequently be challenged as well.

People have different opinions about what corporate social responsibility (CSR) is, and what it should be. Some of the differences may reflect different or evolving views of the subject itself. The understanding of CSR may also differ among industries and companies, as these usually share a specific mix of ethical challenges involved in their businesses. This may explain why several areas of CSR have developed, each attempting to address the sustainability problem from a slightly different perspective.

In the investment sector, CSR concerns have emerged as central factors in measuring the sustainability and ethical impact of investment in a company or business. The same factors have become equally prominent in insurance business. However, when it comes to underwriting risks, corporate concerns may appear less relevant for engineering underwriters than many other risk aspects. The engineering underwriter's focus is on the individual project and risk rather than on the CSR approach of the companies engaged. The environmental and social components of CSR are therefore probably more significant for engineering underwriters than concerns about the executing companies.

Environmental and social awareness in society has been increasing rapidly, and the public's focus has now widened from entities directly linked to problematic businesses to ones that provide financial services to businesses that could be perceived as unsustainable or harmful. In this context, not only banks but also insurance and reinsurance companies are increasingly being seen as "enablers" of environmentally and socially controversial projects/businesses that are scrutinised by the public and as a result those companies have identified increasing potential of financial loss in their risk management.

This paper offers a number of descriptions and definitions regarding CSR and explains the UN's Principles for Sustainable Insurance (PSI). It also presents potential concerns about CSR when it comes to writing engineering insurance business, and discusses the potential responsibilities of engineering underwriters with regard to sustainability and possible ways of integrating CSR into the underwriting process.

The views expressed in this presentation are those of the working group members and do not necessarily reflect the views of their employers.

1 Descriptions and definitions

1.1 History and recent developments

Economics became an independent science only in the 18th century. Prior to that, it formed part of moral philosophy. However, the general perception was that economics, characterised by rationalism, was inconsistent with value statements stemming from irrational morality (ethics). Over time, the link between ethics and economics was re-established and evolved into business practices which subscribed to the idea that a company must strive to provide optimal results to everyone concerned, instead of being concerned with maximising the profits of a single stakeholder or group of stakeholders.

More recently, ecological problems, social movements and the ever-increasing scandals engulfing business life have raised expectations of business being conducted in an ethical way. The public focus was initially on companies directly responsible for perceived unethical behaviour but has now been widened from companies responsible for unethical behaviour to include those that finance them.

Following numerous high-profile cases that came under attack from environmental activists, the Equator Principles (EPs) were established in 2003 by a group of project-financing banks, in association with the World Bank's International Finance Corporation (IFC). The definition of the EPs was triggered by large-scale infrastructure projects such as power plants, dams, mines, and oil and gas projects. They include a set of voluntary standards designed to help banks identify and manage the social and environmental risks associated with the direct financing of large infrastructure projects. The principles have so far been adopted by 78 financial institutions in 35 countries.

In 2006, the United Nations Principles for Responsible Investment (UNPRI) were launched and, by the start of 2008, had been signed by more than 200 investors and investment firms representing more than US\$ 10 trillion and today there are around 1250 signatories.

By mid-2000, the United Nations Environment Programme's Finance Initiative (UNEP FI) started to explore the possibility of establishing environmental social governance (ESG) principles for the global insurance industry. The results of this initiative were introduced at the Rio+20 Earth Summit in 2012 and included four overarching Principles for Sustainable Insurance ("PSI" or "the Principles"). Endorsed by the UN Secretary-General, the Principles have led to the largest collaborative initiative between the UN and the insurance industry – the PSI Initiative – aimed at propelling environmental, social and economic sustainability. By March 2014, the Principles had been signed by 42 insurers representing around 15% of world premium volume and US\$ 8 trillion in assets under management, as well as by 30 insurance market bodies.

The CRO Forum, consisting of Chief Risk Officers from various institutions, was formed in 2004 with the primary objective of advancing risk management practice in the insurance industry. The Forum has been instrumental in identifying best industry practices and in promoting and aligning these practices and regulatory regimes. By setting up a Working Group on Sustainability the CRO Forum recognized that sustainability challenges inherent to business transactions require systematic detection, assessment and management.

The term "environmental social governance" (ESG) has emerged globally to describe the environmental, social and corporate governance issues that investors and financial institutions consider in the context of corporate behaviour.

1.2 Stakeholder concept and corporate social responsibility (CSR)

Insurance companies demonstrate through corporate social responsibility (CSR) that they care about their stakeholders. Stakeholders can be defined as "any group or individual who can affect or is affected by the achievement of the organisation's objectives".¹

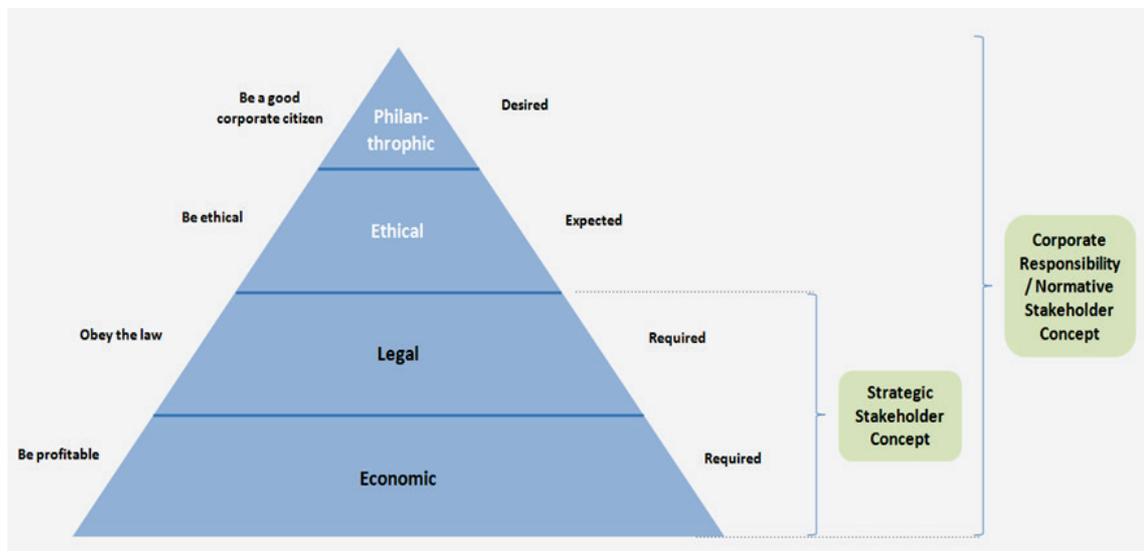
When considering stakeholders' interests, strategic stakeholder management would focus exclusively on the possible positive or negative effects on corporate business performance and would therefore consider only the interests of primary stakeholders. In contrast, broader normative stakeholder management would also include the interests of secondary stakeholders in the company's decision-making process, and the approach would reflect not only commercial but also social and corporate issues.

Primary Stakeholders	Secondary Stakeholders	
<ul style="list-style-type: none"> • Employees • Communities • Shareholders • Creditors • Investors • Customers 	<ul style="list-style-type: none"> • Suppliers • Labour unions • Government regulatory agencies • Government legislative bodies • Government tax-collecting agencies • Industry trade groups • Professional associations • NGOs and other advocacy groups • Prospective employees 	<ul style="list-style-type: none"> • Prospective customers • Local communities • National communities • Public at large (global community) • Competitors • Schools • Future generations • Analysts and media • Alumni (ex-employees) • Research centres •

¹ [Freeman, R. Edward](#) (1984). *Strategic Management: A stakeholder approach*

Company stakeholders are increasingly interested in the social and environmental footprint of their own behaviour and that of their partners and counterparts. Wherever possible, investors, clients or individuals therefore try to avoid dealing with companies that show irresponsible behaviour. Stakeholders seek to endorse companies acting responsibly in the context of CSR and avoid affiliating themselves with ones that act contrary to their own ethical standards. Insurance companies are both companies with stakeholders and stakeholders of companies.

Inadequate environmental and social stewardship may not only be damaging to a company's reputation but could also lead to the direct loss of stakeholders, as these have choices in terms of who they want to partner with. Therefore the aim nowadays is to gather the so-called "social license to operate" which ensures that social acceptance is granted by all stakeholders that are or can be affected by the project.



"The social responsibility of business encompasses the economic, legal, ethical and philanthropic expectations that society has of organisations in today's environment."²

Other definitions of corporate social responsibility (CSR) are:³

- Bowen (1953)

CSR refers to the obligations of businessmen to pursue those policies, to make those decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society.

² Carroll, A.B.: The Pyramid of Corporate Social Responsibility.

³ *Int. J. Business Governance and Ethics*, Vol. 1, No. 4, 2005.

- Friedman (1962)
There is one and only one social responsibility of business – to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud.
- Davis and Blomstrom (1966)
Social responsibility, therefore, refers to a person's obligation to consider the effects of his decisions and actions on the whole social system.
- Sethi (1975)
Social responsibility implies bringing corporate behaviour up to a level where it is congruent with the prevailing social norms, values, and expectations of performance.
- Jones (1980)
Corporate social responsibility is the notion that corporations have an obligation to constituent groups in society other than stockholders and beyond that prescribed by law and union contract.
- Wood (1991)
The basic idea of corporate social responsibility is that business and society are interwoven rather than distinct entities.
- Baker (2003)
CSR is about how companies manage the business processes to produce an overall positive impact on society.

The main difference between the normative and the strategic stakeholder concept means therefore that responsibility is taken which lies beyond legal requirements and which is embodied in the core business principles of the company.



Legality and profitability are undisputedly core components of entrepreneurial activities. However, law and order alone is not enough. Only through the application of ethical dimensions can corporate strategies go beyond pure compliance with regulations and laws. An important aspect is that companies should voluntarily expose themselves to the basic principles of corporate responsibility, because ethical and philanthropic principles are not based upon laws and legislation. Moreover, the whole point of CSR is not only to be aware of the consequences of business activities but also to take responsibility for the actions taken.

Nor must CSR be confused with so-called "greenwashing", which is deceptively used to promote the perception that an organisation's products, aims and/or policies are environmentally friendly. Genuine CSR has to be deeply rooted in a company's values and cannot be imposed. A good way of describing the ideals of Corporate Social Responsibility is the following:

"It is not about how we spend the money but how we earn it."

1.3 Principles for Sustainable Insurance (PSI), UNEP

The Principles for Sustainable Insurance (PSI)⁴ and possible actions for insurers were published by UNEP in June 2012 during the Rio+20 Conference. They are summarised below (see Appendix for complete description):



1.4 Environmental, social and corporate governance (ESG)

There is no single definition of ESG that describes this term. However, ESG issues typically display one or more of the following characteristics:⁵

⁴ PSI Principles for Sustainable Insurance, UNEP Finance Initiative

⁵ Demystifying Responsible Investment Performance: A review of key academic and broker research on ESG factors, UNEP FI Asset Management Working Group and Mercer, 2007.

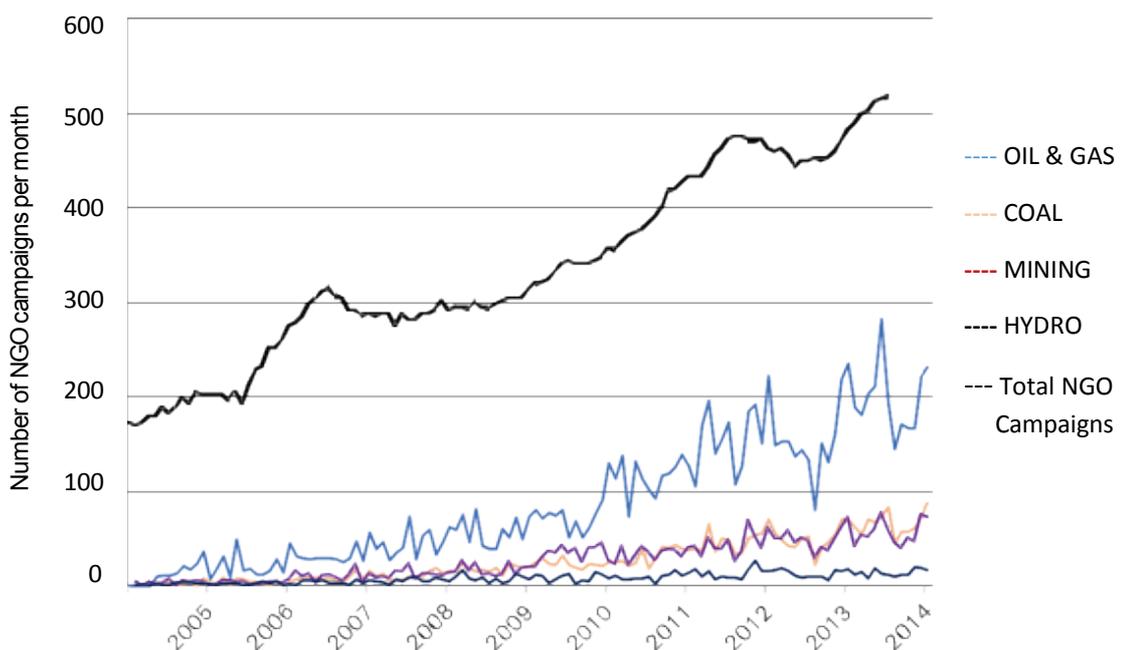
- Issues that have traditionally been considered non-financial or not material
- A medium or long-term horizon
- Qualitative objects that are readily quantifiable in monetary terms
- Externalities (costs borne by other firms or by society at large) not well captured by market mechanisms
- A changing regulatory or policy framework
- Patterns arising throughout a company's supply chain (and therefore susceptible to unknown risks)
- A public-concern focus

2 ESG concerns in engineering insurance business

Engineering insurance is of significance for every large project. Without insurance, most undertakings such as power, oil and gas or major infrastructure projects could not be realised.

Over the years, there has been a steady increase in reported issues with regard to sustainability and corporate responsibility. The number of large and mega-projects has increased – and so have public awareness and opposition to them.

The following graph shows the number of NGO campaigns on sustainability and corporate responsibility issues.



Source: SIGWATCH, NGO Tracking&Issues Analysis

This steady increase in the number of campaigns continuous to grow and does clearly show the awareness and readiness of opponent stakeholders to further deal with these topics.

2.1 Hydropower projects

Hydropower plants are one way of reducing dependence on fossil energy. Large dams are significant man-made alterations to river basins. They have been built by mankind for centuries and have undoubtedly contributed to the development of many nations.

However, the social, health and environmental costs have been in some cases unacceptable and often unnecessary.

The environmental consequences are often numerous. Rivers and riparian areas can be directly affected from both a physical and biological point of view. Dam walls can block fish migrations and trap sediments which are critical to the balance of maritime flora and fauna. The deprivation of sediment load could increase the erosion of the downstream riverbed and banks, which can weaken adjacent infrastructure. The deepening of riverbeds also lowers groundwater tables, making them less accessible to plant roots and human communities. In fact, the damage can extend for hundreds of kilometres below the dam.

Once a dam has been built, there is no longer a free-flowing river ecosystem, and this can lead to temperature increases and significant biological changes which may not be suitable for the aquatics plants and animals that evolved to live in a given river system. Reservoirs often host non-native species like algae that may pose a threat to the balance of nature and lead to the extinction of many fish and aquatic species.

In the past dams have sometimes been built with little or no consideration for health standards, with the result that displaced communities have been resettled on the banks of reservoirs with no healthcare, water or sanitation facilities. The environmental and social disruption resulting from the construction and operation of these dams has led to the incidence and transmission of many vector-borne diseases, very prominent among which is schistosomiasis, a disease that has been reported in 75 countries, affecting 200 million people globally.⁶

Industry Sector	Environmental Issues	Socio-Economic
Large dams (hydro power / water management)	<ul style="list-style-type: none"> - Deforestation - Habitat fragmentation (i.e. blockage of critical fish migration routes) - Biodiversity loss - Impacts on water quality - Pollutant emissions due to non-deforested inundation areas 	<ul style="list-style-type: none"> - Labour laws - Displacement of communities - Insufficient local consultation - Loss of livelihoods (e.g. fishing and farming) - Depletion of fish stocks - Impact on regional food security - Inadequate health and safety standards - Adverse impact on downstream neighbouring states and interests - Negative impact on indigenous people - Cultural heritage

⁶ Etiosa Uyigwe (2005), Dams and Livelihood: The Problems of Parasitic Diseases in Communities Hosting Dams in Nigeria.

2.2 Mining projects

Like hydropower projects and dams, mining projects can often have a huge impact on large areas above and below ground. The changes are obvious in surface mining when soil is removed and vegetation destroyed over large areas. Due to the size of the projects, the damage caused is very often irreversible. Large areas are deforested or fertile soil is removed by means of explosives and mining equipment, including 600-ton dump trucks. The impact on groundwater can be significant, irrespective of the mining technique used, and, if not properly regulated, mining could potentially release very hazardous substances into the soil, air and water, adversely affecting the health and wellbeing of local populations.

In order to minimise damage to an acceptable level, regulation is necessary to deal with conflicts that may arise over the international trade of minerals. However, there are no international standards, and the only regulations that exist on environmental issues are those established by national governments, with no consistency between them. It is therefore very difficult to effectively monitor companies which can find ways to circumvent local regulations through lobbying and bribery.

Industry Sector	Environmental Issues	Socio-Economic
Mining	<ul style="list-style-type: none"> - Deforestation - Water overuse and pollution (e.g. tailings, use of mercury and cyanide etc.) - Soil and air pollution - Habitat destruction - Mountaintop removal (MTR) 	<ul style="list-style-type: none"> - Corruption, tax evasion, lack of transparency - Disputes over land rights - Social unrest (e.g. conflicts involving military forces or armed groups) - Financing of armed groups ("conflict minerals") - Displacement of communities - Insufficient public consultation - Infringement of indigenous peoples' rights - Impact on health of communities - Repression of workers' unions - Inadequate health and safety standards - Child labour

2.3 Oil and gas projects

Large oil refineries are landmarks in many parts of the world. Due to the toxic attributes of petroleum and the high risk of fire or explosion, the petroleum industry is normally settled in largely unpopulated areas. The exhaust of incompletely burned compounds, acid rain created through nitrous oxides with sulphur dioxide, and also oil spill are some of the risks inherent in this industry. Climate change due to large emissions of carbon dioxide which is a threat to the earth and a global problem of our civilisation must also be mentioned here, of course.

Oil is not just an important energy source but is also the main component of several consumer goods, hence our dependence on petroleum products. However, everyone knows that the oil and gas industry can have a harmful impact on the environment. Pollution is probably one of the most dangerous consequences and can occur at any stage, from exploration activities to refining. Most energy operators are aware of it and try to reconcile the world's growing energy demand with environmental protection and a sustainable development approach. The aim is to play a positive role by adopting pollution prevention practices and sharing benefits with local communities.

Industry Sector	Environmental Issues	Socio-Economic
Oil and gas	<ul style="list-style-type: none"> - Pollution of ecosystem - Oil spills - Air pollution (e.g. gas flaring) - Waste issues 	<ul style="list-style-type: none"> - Corruption, tax evasion, lack of transparency - Social unrest (e.g. conflicts involving military forces or armed groups) - Vandalism, theft of oil and sabotage of oil installations - Infringement of indigenous peoples' rights

2.4 Thermal power plants

Our civilisation is energy-dependent, of course, and the use of fossil energy is unsustainable the way we currently consume it. According to the Worldwatch Institute, coal, natural gas and oil accounted for 87% of global primary energy consumption in 2012. Coal is by far the least convenient of these fossil energy sources, because of its caloric content. Additionally, it is more difficult and energy-consuming to transport.

Efficiency improvements through modern technology can reduce the emission of carbon dioxide and its impact on global warming. Damage to the environment can be reduced significantly through the installation of filters, as well as desulphurisation systems for removing sulphur dioxide (SO₂) from flue gas exhaust with an efficiency of up to 98%.

Environmental issues for this type of power plant are well known. There is an impact on air quality due to the release of noxious gases (SO₂, NO_x) and solids (mercury and lead) into the atmosphere. Some of the gases (mostly CO₂) released after combustion contribute to global warming.

These issues do not exist with nuclear power plants. However, the residual risk associated with nuclear power, as well as the lack of long-term solutions for the storage of nuclear waste, are the reasons why nuclear power projects are scrutinized by the public.

Industry Sector	Environmental Issues	Socio-Economic
Thermal power	<ul style="list-style-type: none"> - Air pollution (intl. standards) - Water and soil pollution - Water overuse - Site selection in general 	<ul style="list-style-type: none"> - Impact on health of communities - Degradation of livelihoods - Insufficient local consultation - Strong local opposition - Inadequate health and safety standards - Uninhabitable landscapes following a potential nuclear accident

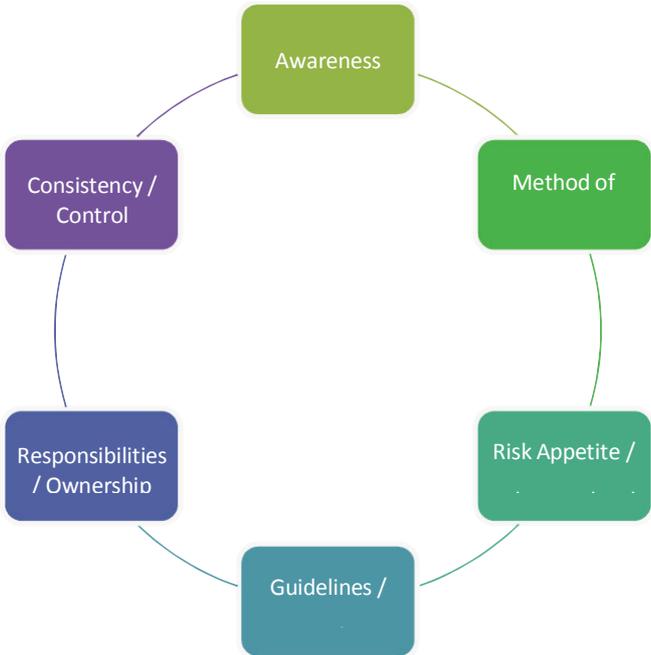
3 Possible ways of integrating ESG principles into the underwriting process

While the financial services offered by insurers may be perfectly legal, there are societal expectations on insurers' behaviour that go beyond legal compliance. With increasing globalisation and advanced communication technologies, companies' business decisions that may have an impact on environmental and social equilibrium are closely monitored. Aside from environmental, social and ethical considerations, companies that fall short on providing sustainable insurance run a high risk of severe reputational damage. Recent surveys found that reputation-related risks are now considered among the top risks to the insurance industry. State-of-the-art enterprise risk management (ERM) has identified reputational damage as a key consequence of operational failure. The Solvency II Directive introduces new requirements on operational risk, while Standard & Poor's evaluation process for credit ratings includes a review of ERM practices which also extends to reputational risks.

3.1 ESG: assessment and management

The primary focus of traditional risk management models has clearly been on avoiding financial losses. Today, protecting and enhancing a company's reputation ranks as one of the most important elements of risk management. While various risk-transfer options are available to insurers to manage the volatility of their portfolios, reputational risk cannot be transferred, hedged or diversified. The only way for a company to manage this risk is to reduce it, thereby calling for a holistic approach to risk management. The CRO Forum ⁷ has proposed six recommendations to provide insurers with a set of suggestions which can be considered in conjunction with defining a company-specific risk management concept to manage sustainability challenges. These recommendations are aligned with the "Principles for Sustainable Insurance" (see section 1) and are briefly discussed below.

⁷ CRO FORUM – Chief Risk Officer Forum, Recommendations for Managing Environmental, Social and Ethical Challenges in Business Transactions – August 2010.



Awareness:

Awareness is the first and most important step towards an effective and robust sustainability framework. For the successful implementation of any such programme, the involvement and commitment of the Board and senior management is vital. There needs to be a clear understanding of the link between decision-making at any level of authority and the potential impact on corporate reputation and success. Since the activity range in terms of geographical reach and insurance products differs from insurer to insurer, the environmental and social consequences of business transactions are not necessarily industry-specific. Clearly, a key element in this first step is effective communication across the organisation. Sustainability topics should become a fixed component of underwriting training. The importance of sustainability topics can easily be illustrated by recent events that have come under public scrutiny due to their perceived adverse environmental and social consequences.

Method of assessment

As mentioned in section 2, the environmental social governance concerns are diverse, and insurers need to evaluate which sustainability topics are most relevant for the company in conjunction with its strategic product offerings, geographical reach, client base and growth plan. The assessment of the relevant sustainability issues may include media surveys (public view of environmental, social and ethics-related issues), dialogue with NGOs, or reviews by internal and/or external experts. For engineering project insurers, industry segments that might present the highest sustainability challenges include industries such as oil and gas, mining and power.

Risk appetite / Tolerance level

The definition of the tolerance level, in terms of sustainability challenges and the subsequent development of a group-wide framework managing ESG, is typically approached from two angles. First and foremost, the company's core values must clearly be the guiding principles when defining the tolerance level for sustainability challenges; for example, when does a transaction correspond to these values and when is it beyond a company's values tolerance level? Secondly, particular transactions and their consequences on integrity and reputation provide a gauge for setting the tolerance level. What is at stake for the company if a transaction negatively impacts stakeholders' perceptions in the context of environmental, social and governance aspects? Understanding these implications will form the basis for a company-wide framework to manage sustainability issues.

Guidelines / Tools

The effective management of environmental, social and ethical challenges stands and falls with appropriate tools and guidelines available to evaluate insurance transactions. This not only includes concrete and verifiable indicators to be assessed at the underwriting level for a particular business transaction, but also provides clear definition in terms of how sustainability challenges can be mitigated or even eliminated. Given the wide variety and complexity of sustainability challenges, additional support at the underwriting level from designated sustainability experts is needed to support an efficient and effective screening process.

Responsibilities / Ownership

The responsibility for managing ESG challenges must be accepted by employees at all levels of management. However, the actual responsibilities at each level with respect to managing these challenges need clear definition for identification, assessment, mitigation, reporting and review. Reaching company growth targets within a company's defined sustainability framework, particularly in high-growth markets, can lead to conflicts which necessitate the introduction of an escalation process to facilitate a fair resolution.

Consistency / Transparency

An insurance company's core values apply to all its business activities. The same sustainability approach should therefore be applied to both insurance and investment, as the implication of an insurance company with a perceived sustainability issue is irrelevant from the stakeholder's perspective. Even where an insurer is fully committed

to sustainable insurance, it must be recognised that there are limitations in terms of a company's ability to influence events. There are legitimate reasons why specific sustainability challenges in relation to certain transactions cannot be identified or addressed. The scope of sustainability challenges evaluated for some transactions can vary, but needs to be aligned with a consistent and transparent communication plan.

3.2 ESG framework in engineering underwriting

Prudent engineering underwriting involves considering a multitude of aspects in order to assess risks and establish a basis for sound underwriting decisions. This process is mainly driven by a company's strategy, which may also change over time. As discussed throughout the paper, there are compelling arguments why an insurer needs to integrate ESG criteria into the underwriting process.

The sustainability topic poses a major challenge for insurers, and the implementation of an effective risk framework to manage this challenge is very complex and involves a company-wide effort and commitment. The main focus and subject of this paper is to provide some guidance on how sustainability topics can be dealt with from an engineering insurer's perspective.



For some business transactions, applying common sense and good judgement could be sufficient for managing associated reputational risks. However, there are situations in which transactions need to be scrutinised, and the investigation of the environmental, social and ethical aspects needs to be based on specific factual and logical criteria. For these situations, a more systematic due diligence process is likely to help a company to be better received both internally as well as externally.

To facilitate assessment at the underwriting level, an easy-to-follow, tangible due diligence process needs to be defined which involves three main steps:



3.2.1 Tolerance level / Risk appetite

For each company, there are "no-go" areas in terms of the geographical spread, companies and technologies or products where the conduct of business is simply unacceptable. In general, the definition of regions where an insurer does not wish to maintain business relationships is linked to international sanctions that have been imposed for certain regions and countries by the United Nations and other international bodies. In addition, the insurer's core values and ethical orientation clearly preclude supporting business transactions with specific companies and/or transactions that involve certain technologies, activities and products. This would typically include companies where human rights are systematically and repeatedly violated and/or the use or proliferation of technologies where damage to the environment remains unmitigated.

An insurance company may define specific conditions that relate to areas of concern that trigger a due diligence process. Sustainability challenges are more prone to arise in countries with a weak regulatory environment ^{8/9}. A weak regulatory environment can encompass both non-existent or minimal regulation of negative industrial production, and non-existent or minimal administrative external effects of capacity to enforce existing regulations. Countries with weak enforcement of social and environmental standards may fuel short-term economic growth at the cost of natural resource degradation, and compromising social standards. Another element to consider is corruption, which clearly negatively impacts the quality of regulation¹⁰. Where corruption is systemic, the formal rules remain in place but are superseded by informal rules. It may be a crime to bribe a public

⁸ The Efficacy of Regulation in Developing Countries, Seema Hafeez, 2003, United Nations

⁹ Fostering Environmental Regulation? Corporate Social Responsibility in Countries with weak regulatory capacities, Jana Hönke et al, Governance in areas of limited statehood.

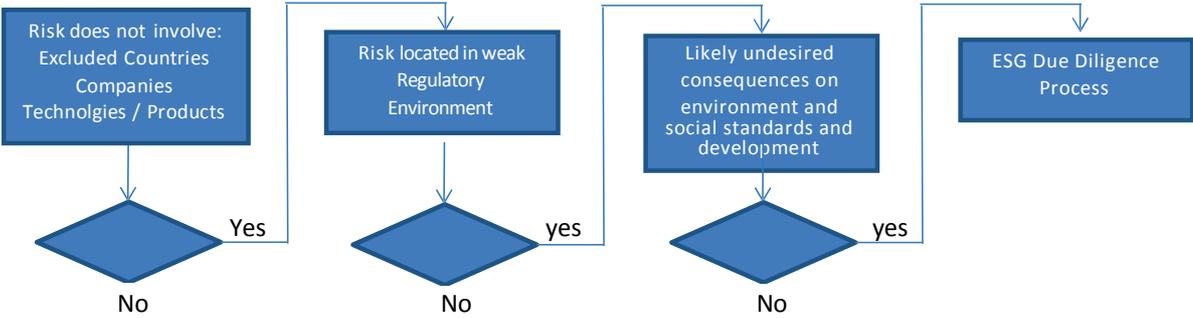
¹⁰ Corruption Perceptions Index 2013, Transparency International.

official but, in practice, the law is not enforced or is applied in a partisan way and informal rules prevail.

As mentioned in the previous section, undesired consequences for local environment and social standards are more likely to occur in a weak regulatory environment and should trigger a more specific investigation of the sustainability aspects listed below:

- Project to include forced labour or child labour
- Project involves substantial land acquisition and involuntary resettlement
- Project impacts vulnerable social groups or indigenous peoples
- Project restricts local population's access to natural resources such as water quantity or quality
- Project adversely impacts on critical cultural heritage
- Project negatively impacts environment and natural resources
- Project is associated with proliferation of nuclear weapons

Possible action enabling an insurer to integrate a tangible framework into the underwriting process can include the definition of a list with "no-go" areas in terms of product and service deployment and a decision tree for underwriters to evaluate when a business transaction must undergo due diligence review



3.2.2 Due diligence process

As previously indicated, there are inherent limitations in terms of an insurer's ability to influence events. However, for a particular undertaking there are some indicators that can be verified to assess the extent to which environmental and social challenges have been identified and addressed. While there is no all-encompassing list of indicators, the following tables provide the main indicators for industry segments that may be most relevant for engineering insurers from an ESG perspective. They should also offer some guidance in terms of what questions to ask during the underwriting process.

Both environmental and socio-economic issues are listed that can result in potential sustainability challenges for insurers. The assessment of mitigation measures includes a list of potential sources that can aid the due diligence process.

Industry Sector	Assessment of Mitigation Measures
Large dams (hydro power / water management)	<ul style="list-style-type: none"> - Environmental social impact analysis - Labour assessment - Health, safety and environment plans - Standard of financing entity - Local opposition / controversy (media search) - Adoption of CSR standards and principles by contractors - Application of the recommendations of the World Commission on Dams
Fossil power plants Mining Oil and gas	<ul style="list-style-type: none"> - Environmental social impact analysis - Labour assessment - Health, safety and environment plans - Standard of financing entity - Local opposition / controversy (media search). - Adoption of CSR standards by principals and contractors.

Information requirements

In modern project development and planning, environmental and social impact analyses (ESIAs) are considered to be standard elements, especially for large infrastructure projects. Reports summarising the findings of these analyses are crucial for a meaningful assessment of sustainability issues and should be part of the standard information package submitted to insurers and financial institutions. A general list of issues typically addressed in the ESIA is provided in the Appendix. With today's advanced communication technologies, media scans and public statements from non- governmental organisations (NGOs) can also be effective ways of obtaining additional information about specific undertakings. It is noted here that access to detailed risk information and/or the insured party in the case of treaty reinsurance business can be limited, preventing the insurer from conducting a thorough due diligence assessment.

Additional indicators

As the information provided is often not sufficient for proper assessment and decision-making, there are a few additional indicators that may help to qualify a transaction in terms of the depth in which sustainability issues are considered and the mitigation measures implemented.

The following indicators, amongst others, can support consideration and the final decision-making process:

- To what standards is project financing secured – do the financial institutions involved comply with the Equator Principles?
- How are the parties involved committed to corporate responsibility topics?
- Does the country adhere to EITI standards/principles (oil and gas and mining sector)?
- Has the country signed the International Labour Organization conventions stipulated by the United Nations?
- Have other stakeholders made a commitment to adhere to PSI standards – ESG commitment of other project stakeholders?

A list of useful links for further information is also provided in the Appendix.

3.2.3 Decisions / Communication

It is evident that there is a wide variety of sustainability issues which make the assessment of projects/transactions very complex. An effective ESG framework clearly defines the responsibilities and ownerships in terms of identifying and assessing sustainability issues and their potential impact on the company.

While the individual underwriters are faced with the initial task of evaluating a transaction, one option is, that they could be supported by designated sustainability experts. Some companies have their sustainability experts embedded in the risk management organisation in order to aid the evaluation process and keep track of systemic issues (i.e. risk was previously declined, countries/companies with a record of repeated violations, companies that have endorsed specific industry standards to address ESG issues, examples of successful implementation of mitigation measures, issues that have arisen in other product lines etc.). But there are also other possibilities to embed respective processes within a company and there are also qualified external research providers specialising in environmental, social or ethical risks that can support the process.

A robust ESG framework includes a clear escalation process whereby cases are submitted for further elaboration on balancing growth targets with risk appetite in the event of conflicts arising between business and risk management interests. The various authority and hierarchy levels on both the business and the risk management side where decisions are taken must be defined. Where necessary, a final decision must be taken at the Board level. Any final underwriting decision, especially for transactions that could be perceived by the public as having adverse environmental and social consequences, needs to be transparent to all stakeholders and find broad support within the company.

It should be noted that, despite good quality of due diligence, the facts behind the consequences of certain transactions often remain somewhat hazy.

Whether a transaction is supported or not remains at the discretion of the company but should be communicated in a clear and unambiguous fashion. To ensure proper messaging, an appropriate communication plan/policy must be in place. Reasons that led to the final decision to refrain from participating in a certain project, because of sustainability issues, should be made available to the client, as well as to other involved parties. The acceptance of the decision and awareness of the criteria are thereby increased, and detailed feedback also allows project participants to improve respective conditions of the project.

4 Appendices

Appendix 1: Issues addressed in ESIA analyses

The list below is an extract from the "Equator Principles"¹¹ and provides a general overview of the issues that are typically addressed in an environmental and social impact analysis.

The specific issues addressed in the analysis may obviously vary from project to project.

- a) assessment of the baseline environmental and social conditions
- b) consideration of feasible environmentally and socially preferable alternatives
- c) requirements under host country laws and regulations, applicable international treaties and agreements
- d) protection and conservation of biodiversity (including endangered species and sensitive ecosystems in modified, natural and Critical Habitats) and identification of legally protected areas
- e) sustainable management and use of renewable natural resources (including sustainable resource management through appropriate independent certification systems)
- f) use and management of dangerous substances
- g) major hazards assessment and management
- h) efficient production, delivery and use of energy
- i) pollution prevention and waste minimisation, pollution controls (liquid effluents and air emissions), and solid and chemical waste management
- j) viability of Project operations in view of reasonably foreseeable changing weather patterns/climatic conditions, together with adaptation opportunities
- k) cumulative impacts of existing Projects, the proposed Project, and anticipated future Projects
- l) respect of human rights by acting with due diligence to prevent, mitigate and manage adverse human rights impacts
- m) labour issues (including the four core labour standards), and occupational health and safety
- n) consultation and participation of affected parties in the design, review and implementation of the Project
- o) socio-economic impacts
- p) impacts on Affected Communities, and disadvantaged or vulnerable groups
- q) gender and disproportionate gender impacts
- r) land acquisition and involuntary resettlement
- s) impacts on indigenous peoples, and their unique cultural systems and values
- t) protection of cultural property and heritage
- u) protection of community health, safety and security (including risks, impacts and management of Project's use of security personnel)
- v) fire prevention and life safety

¹¹ Equator Principles, June 2013 www.equator-principles.com

Appendix 2: Further information (link list)

The following link list provides sources for further information and guidance:



IFC – World Bank Group Environmental, Health, and Safety Guidelines (known as the "EHS Guidelines") are technical reference documents with general and industry-specific examples of Good International Industry Practice (GIIP).



ILO – International Labour Organization gives advice on which labour ratifications have been signed by individual countries.



UNESCO – United Nations Educational, Scientific and Cultural Organization has defined conventions concerning the protection of the World Cultural and Natural Heritage.



The Equator Principles (EPs) are a risk management framework, adopted by financial institutions, for determining, assessing and managing environmental and social risk in projects and are primarily intended to provide a minimum standard for due diligence to support responsible risk decision-making.



Transparency International provides a Corruption Perception Index.



EITI – Extractive Industries Transparency Initiative provides more transparency on how a country's natural resources are governed.



The CRO Forum is a group of professional risk managers from the insurance industry that focuses on developing and promoting industry best practices in risk management. The Working Group on Sustainability is of special interest here.



Maplecroft offers a Political Risk Map.

Appendix 3: Definition of good standards

In order to achieve a common understanding within a company on what is to be considered as good or worse in terms of the individual ESG criteria, it is recommended to define internal standards as guidance for daily underwriting.

The following table is intended to give only exemplary guidance and hints in terms of the structure of such a standard. Some examples are also given of which indicators could lead to a positive or negative assessment.

Social implications	
Political context and public awareness	
Con	<ul style="list-style-type: none"> • If profits will be exported from the region, with few benefits accruing to communities that bear the greatest disruption costs of the development •
Pro	<ul style="list-style-type: none"> • If communities that bear the greatest disruption costs of the development would also share in the profits
Labour and working conditions	
Con	<ul style="list-style-type: none"> • If there is any child labour or forced labour associated with the project or any of its suppliers •
Pro	<ul style="list-style-type: none"> • If the host country has ratified ILO conventions or other international conventions on labour rights •
Health, safety and security for the community	
Con	<ul style="list-style-type: none"> • If the existing infrastructure and services (social and health services, sewage and waste management, traffic infrastructure etc.) would not be able to cope with a significant increase in construction workers in the area, or if adequate improvements to infrastructure and services are not planned •
Pro	<ul style="list-style-type: none"> • If an Emergency Preparedness and Response Plan[i] exists in case of catastrophic events in the context of the project, in order to guarantee the health and security of the affected com •
Displacement of people	
Con	<ul style="list-style-type: none"> • If realisation of the project will lead to displacement and resettlement of people and loss of livelihoods •

-
- Pro**
- If a Resettlement Action Plan was implemented or there was an Indigenous Peoples Development Plan
 -

Cultural heritage

- Con**
- If the project will affect or impede access to sites, structures, or resources having archaeological, historical, religious, spiritual or cultural value
 -
- Pro**
- If the host country has ratified the Convention concerning the Protection of the World Cultural and Natural Heritage
 -

Environmental implications

Pollution prevention

- Con**
- If local climatic conditions will significantly exacerbate project impacts (e.g. air pollution (smog), impacts of recurrent droughts on food security, soil sealing with increasing risk of inundation)
 -
- Pro**
- If an Environmental Impact Assessment Study exists for the project, optimally done by a neutral body
 -

Conservation of natural resources and biodiversity

- Con**
- If there will be substantial loss or reduction in existing land use, potential land use, access to or quality of local natural resources on which communities depend now or in the future (e.g. arable land, mangroves in coastal areas or other vegetation with protective function, fishing grounds)
 -

-
- Pro**
- If compensatory measures (last option, when there is no possibility of recovering damages) were implemented
 -