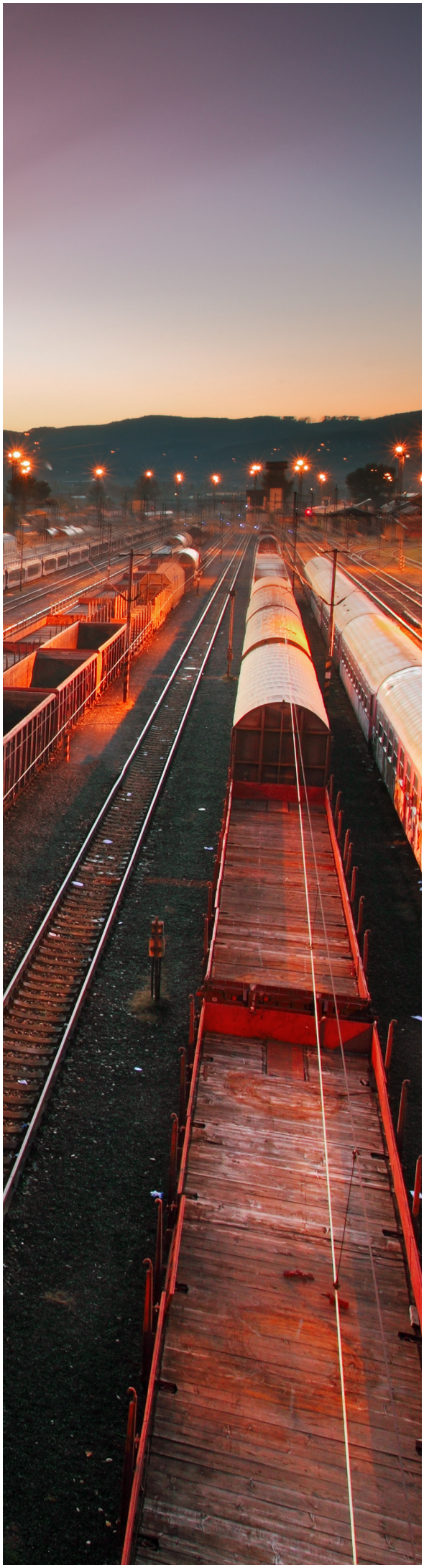
Global Infrastructure Basel

NATIXIS

SuRe®
The Standard for Sustainable and Resilient Infrastructure
v 0.2

9 December 2015



SuRe® - the Standard for Sustainable and Resilient Infrastructure v 0.2

Document code: ST1
Version: 0.2
Approval date: 9.12.2015
Effective date: 9.12.2015
Official language: English

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1 Introduction to this document

This document provides an overview of the requirements covered by SuRe® - the Standard for Sustainable and Resilient Infrastructure ("SuRe®" hereafter). Beside the present introduction, Chapter 2 provides a brief overview of SuRe®; Chapter 3 describes the requirements covered by the Standard, and Chapter 4 contains relevant appendices and references.

This document has been created for the intended users of the standard - project developers, financiers and public sector institutions - as well as a general audience. More background information regarding SuRe® is available in the *Guide to SuRe®* (December 2015).

Figure 1 below provides an overview of the versions to date of SuRe®, while Figure 2 lists the relevant SuRe® documents that accompany SuRe®.

Figure 1 - Changes to this document

Version no	Date	Description of Amendment
0.1 (Consultation draft)	5 September 2015	Chapter 5 of the SuRe® Handbook.
0.2	9 December 2015	SuRe® requirements have been restructured and provided in one separate document based on Chapter 5 of the SuRe® Handbook and following the first public consultation.

Figure 2 - Current SuRe® documents

Name	Code	Version number	Publication date	Effective date
Guide to SuRe®	GD1	1.0	9 December 2015	9 December 2016
SuRe® Standard-Setting Procedures	SS1	1.0	16 April 2015	16 April 2015
SuRe® Governance Bodies	GO1	1.0	16 April 2015	16 April 2015

2 About SuRe®

SuRe® is a global voluntary standard which integrates sustainability and resilience aspects into infrastructure development and upgrade. SuRe® consists of 76 criteria divided into 14 themes spanning environmental, social and governance aspects and relies on independent verification and certification of infrastructure projects.

Figure 3 - Overview of SuRe® dimensions and themes

Dimension	Theme	Number of Criteria
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2.1 Objectives & Scope

SuRe® aims to drive the integration of sustainability and resilient aspects into infrastructure development and upgrade by:

- establishing a common language and understanding of sustainable and resilient infrastructure projects between project developers, financiers, local authorities and end-users;
- providing guidance on how to manage sustainability and resilience aspects of an infrastructure project, both from a risk management and a benefit creation perspective, and starting from as early as possible in the project's lifecycle.

SuRe® combines sustainability and resilience recognising the mutually beneficial relationships between these issues and the need to take a long-term view to infrastructure development in order to meet both the present and future generations' needs.

SuRe® seeks to support transformative actions towards the rollout of more sustainable and resilient infrastructure globally, including in developing and emerging economies where significant infrastructure development is anticipated over the next decades. As such, the SuRe® Standard can be used to leverage both public and private investments in infrastructure in a way that ensures cost-effective access to critical services while strengthening resilience, maximising social benefits and limiting both the social and environmental footprints.

The standard is based on GIB's Grading for Sustainable Infrastructure, which has been used since 2012 as a self-assessment tool for over 150 infrastructure projects.

SuRe® applies to infrastructure projects, including assets and services, with a focus on infrastructure that meets public needs (i.e. beyond the needs of a corporation, individual or exclusive private group).

The scope of SuRe® is not limited to new infrastructure development (commonly described as 'green-field' projects). While project developers are encouraged to apply SuRe® as early as possible in the life cycle of an infrastructure, the standard can also be applied during the refurbishment and upgrading of existing infrastructure (i.e. 'brownfield' projects).

SuRe® can be applied globally. In developing and emerging countries, SuRe® could possibly accelerate the transition towards sustainable and resilient infrastructure by referring to international standards of sustainability and resilience as well as recognised best practices. Moreover, there is a clear opportunity in these regions to leapfrog old technologies in favour of more efficient, contextually appropriate and integrated infrastructure development options, which is particularly attractive in the face or rising infrastructure needs. In developed countries, SuRe® is thought to be particularly relevant for Infrastructure refurbishment and modernisation upgrades as well as new infrastructure development.

2.2 Intended Audience

SuRe® provides general benefits in terms of advancing sustainability and resilience's best practice in infrastructure. It is meant to be user-friendly and to facilitate the clear communication of a project's macro-benefits while enabling project comparability. SuRe® also provides a tool that is compatible with international guidelines and safeguards used by international financial institutions (including Multilateral Development Banks (MDBs)).

SuRe® is intended to be primarily relevant to three target groups:

- **project developers** - this group refers to all participants in the infrastructure project throughout its life cycle and may include infrastructure project owners or companies, asset managers, constructors, engineers working on the project, other contractors and sub-contractors, operations and maintenance (O&M) agents depending on the nature and stage of development of the infrastructure project.
- **infrastructure financiers** - this group refers to both public and private financiers, including governments, financial services (e.g. banks, funds, private equity funds, investment analysts, asset managers etc.), public and development finance institutions, institutional investors, private companies and communities depending on the financing approach of the project and associated sources of finance.
- **public sector institutions** - refers to all public sector departments and institutions that have authority to procure, select, authorise and/or finance infrastructure projects at local, regional, national and international level depending on the location and scale of the infrastructure project.

2.3 Key concept definitions

The term *infrastructure* refers to the physical components of interrelated systems that provide services essential to enable, sustain, or enhance societal living conditions.

SuRe® is relevant to all types of infrastructure**.** It is applicable to different types of infrastructure services including, but not limited to, the following services:

- **water** (including harvesting, storage, management, distribution, treatment and recycling)
- **energy** (including generation, storage and distribution)
- **solid waste** (including collection, distribution, processing, recycling and storage)
- **transport networks, nodes and fleet** (including pedestrian, bicycle, vehicular, rail, water-borne and air transportation)[1]
- **communication networks** (including telephone, cellular and data)
- **social infrastructure** (including education, healthcare, sports and recreation, law enforcement, fire and emergency services)
- **food systems** (including production, storage, processing and distribution)
- **mining and extractive sites**

The *sustainability* of an infrastructure system refers to its ability to meet service needs in a manner that does not make wasteful use of resources, minimises or reverses environmental damage and improves social equality. Sustainable infrastructure systems are those that[2]:

- preserve natural capital, including diversity;
- reduce environmental impact(s);
- increase service value;
- advance social inclusiveness and equality;
- promote transparency and accountability; and,
- strengthen human and labour rights and improve working conditions.

The *resilience* of an infrastructure system refers to its ability to maintain and recover functionality in the face of stresses and shocks, whether these can be anticipated or not. For an infrastructure system to be resilient, it shall[3]:

- be cognizant of change and uncertainty;
- be robust and designed to anticipate potential failures;
- be flexible and adaptable to changing circumstances;
- be resourceful in order to maintain or restore functionality when facing shock or stress;
- include redundancy i.e. building spare capacity to support continuity and accommodate pressures and changes in demand;
- be inclusive and broad in scope to favour social acceptance;
- be integrated with other societal systems to support the achievement of common outcomes.

[1] Note: This does not include exclusive-use vehicles like private automobiles, boats or planes.
[2] UN-Habitat. 2012. *Urban patterns for a green economy: Optimising Infrastructure*. Nairobi: UNON. Pages 11-15.
[3] ARUP. 2014. *City Resilience Index: City Resilience Framework*. London: Ove Arup and Partners Limited. Pages 3-5.

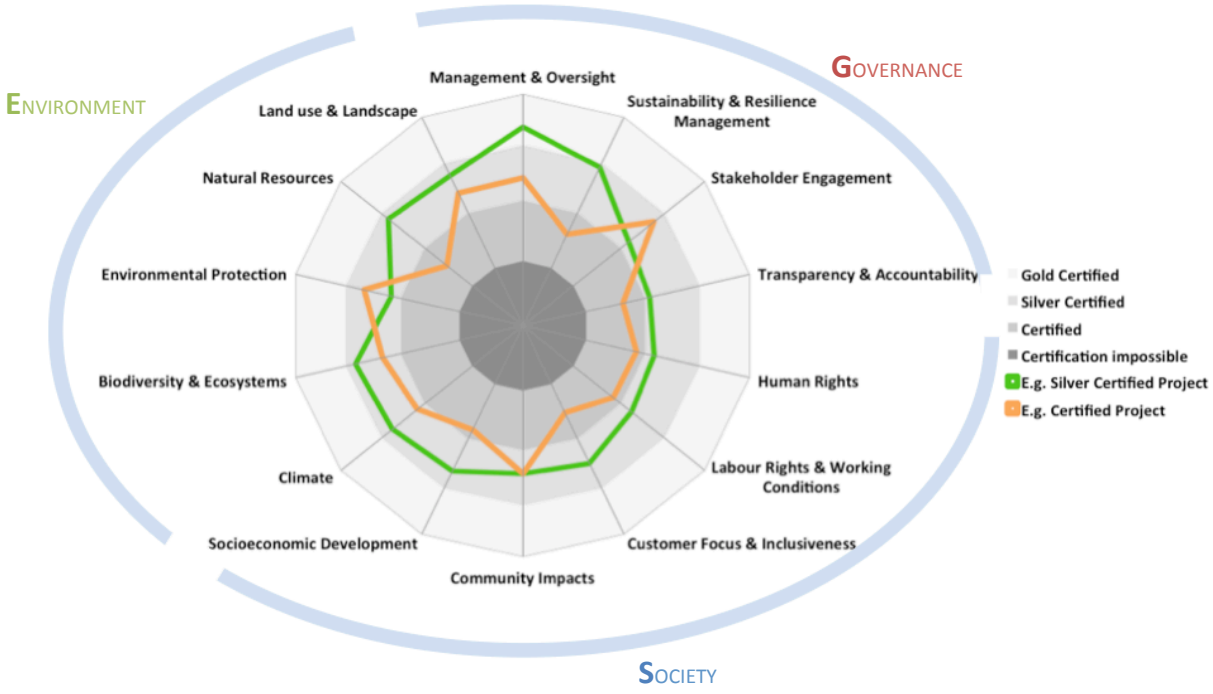
More information about the above definitions is include in the Guide to SuRe® v 1.0 (December 2015) as well as in the Definitions appendix in section 4.1 of the present document.

2.4 Assessment & certification overview

Performance against SuRe® is assessed on the basis of performance levels, differentiating between minimum compliance (PL 1) and superior performance leading to additional positive impacts (PL 3). A number of SuRe® criteria are mandatory requirements, meaning that compliance with PL 1 is required in order to achieve certification. Failure to comply with at least PL 1 for all criteria will result in a score of 0 for the set criteria, meaning that opting out from certain requirement is not possible.

SuRe® certification is based on an independent audit and verification carried out by accredited third parties. Certification is open to infrastructure projects globally and across different types of infrastructure, including both greenfield or brownfield projects. Different levels of certification (SuRe®, SuRe® Silver, SuRe® Gold certifications) are awarded depending on project scores as highlighted in Figure 4 below.

Figure 4 - Overview of SuRe® certification approach



While certification is available at different stages in the development of an infrastructure project, SuRe® encourages project developers to implement SuRe® as early as possible during the design and planning phase when life-cycle thinking can help to optimise sustainability and resilience benefits.

SuRe® wishes to engage projects beyond certification particularly in sectors or regions where barriers to entry for certification may be too high. Therefore, at any project stage, it is possible to use SuRe® as a 'quick scan' tool and thus to guide project design and implementation without any certification or label being awarded.

3 SuRe® - the Standard for Sustainable and Resilient Infrastructure

This Chapter provides a description of the criteria covered by SuRe® - the Standard for Sustainable and Resilient Infrastructure. As outlined in Figure 3 in Chapter 2, SuRe® consists of 76 criteria divided into 14 themes across ESG aspects. Criteria highlighted in red are mandatory requirements. Failure to comply with any of these prevents certification under SuRe® regardless of the project's performance against other criteria (see *Guide to SuRe®* - section 4.2 for more information). Please note that further information on criteria interpretation and performance assessment will be provided in an Auditors' handbook to be published in 2016.

1. Governance

1.1. Management and Oversight

Infrastructure development and/or operations shall be carried out according to high management standards and in compliance with applicable law.

1.1.1. Organisational Structure and Management

A sound and efficient organisational structure shall be established.

Such a structure shall include:

(a) A clear separation of roles (e.g. separation of board and management, oversight, arbitration, etc.)

(b) An unambiguous allocation of responsibilities and duties

(c) Appropriate checks and balances (including in terms of accountability)

(d) Monitoring and evaluation processes so that any issues are promptly identified and reported to management.

Interactions between actors shall be clearly defined and function effectively. At least one member of the project senior management team will be responsible for managing sustainability and resilience.

1.1.2. Decision Making

Efficient decision-making processes shall be implemented and critical decision-making stages in the delivery of the infrastructure asset identified. Decision-making shall rely on documented evidence and consult with relevant departments and stakeholders as appropriate and where relevant.

1.1.3. Team Qualifications, Know-how and Capacity Building

Project teams shall consist of skilled and experienced professionals, qualified to fulfil their tasks and responsibilities and appointed based on merit via a transparent recruitment process. Where relevant, the project owner shall provide training to staff and contractors, including about sustainability and resilience.

1.1.4. Continuous Knowledge Sharing

Knowledge sharing, particularly around sustainability and resilience, shall be encouraged both within the project team and with key stakeholders.

1.1.5. Legal Compliance and Oversight

Adequate policies, procedures and any other applicable mechanisms shall be implemented. Public and documented commitments shall be made to comply with all applicable laws throughout the life cycle of the project. Applicable law shall include local (municipal and regional), national legal, regulatory and administrative requirements as well as applicable international law.

1.1.6. Results Orientation

The goals of the infrastructure project shall be realistically defined and measured. Key Performance Indicators (KPIs) shall be defined, including in relation to sustainability and resilience. Performance against set objectives shall be regularly monitored using agreed KPIs and the consequences of not meeting these shall be clearly specified.

1.1.7. Risk Management

There shall be regular and comprehensive assessment of environmental, social and economic risks. Such assessment should carefully consider infrastructure asset protection over time as well as social and environmental externalities, whether positive or negative.

1.1.8. Interconnectivity and System Thinking

The project shall be considered in its entirety, including its implications for the broader environment and the community. System thinking shall be applied to ensure that relevant dynamics and connections between components are taken into account, including how the infrastructure fits with the city or regional master plan. This should support increased project performance, including in terms of managing sustainability and resilience aspects in line with requisite variety, thus contributing to more sustainable lifestyles and achieving related benefits.

1.1.9. Reporting and Disclosure

The sustainability and resilience performance of the infrastructure project shall be periodically monitored and reported upon at least on annual basis.

Reporting should cover the following aspects:

(a) Identified ESG and resilience risks and opportunities

(b) Incidents of corruption and human rights infringement

(c) Other outcomes relating to stakeholder engagement including engagement with minorities, indigenous groups and other local communities as and where relevant.

Reports shall be made accessible free of charge to staff, contractors and affected communities.

Transparency is strongly encouraged and as such public disclosure of project performance against the above-mentioned aspects should at least comply with applicable laws and follow internationally recognised good industry practice.

Public disclosure of such sensitive cases where corruption or human rights violations have occurred can be made in appropriate form so as to protect the identities of the persons involved.

1.1.10. Financial Sustainability

The project shall be financially sound and fully fundable as evidenced by relevant documentation made available to authorised auditors. The project shall embed mechanisms for cost recovery and/or revenue generation. The cost structure shall consider costs across the whole life cycle of the project including operational costs, cost of capital, asset value and depreciation. Relevant documentation shall include those aspects of a Project Appraisal Document (PAD) or equivalent that cover financial aspects, as per World Bank's Guidelines for the PAD, namely:

(a) An economic analysis confirming the economic soundness of the project;

(b) A financial analysis confirming its financial viability

1.2. Sustainability and Resilience Management

Sustainability and resilience shall be embedded at the core of the infrastructure project. Clear processes to achieve set objectives and targets shall be established.

1.2.1. Environmental and Social Management System

An explicit commitment to sustainability management shall be made. This shall include carrying out a comprehensive Environmental and Social Impact Assessment (ESIA) and establishing, as well as maintaining, an Environmental and Social Management System (ESMS) appropriate to the nature and scale of the project. The ESMS shall cover the following aspects:

(a) A policy defining the sustainability and resilience objectives and principles guiding the project

(b) The identification of risks and impacts

(c) Management programmes covering adequate mitigation and performance improvement measures and actions
(d) Organisational capacity and competency
(e) Emergency preparedness and response
(f) Stakeholder engagement
(g) Monitoring and review, including monitoring of performance against set KPIs and reporting to senior management.
The ESMS shall be embedded in decision-making stages of the infrastructure delivery process.

1.2.2. Life Cycle Approach

The infrastructure project shall apply life cycle thinking. The utility of the infrastructure shall be considered beyond its operational lifespan. Where possible, the useful life of the delivered project should be extended by adding additional considerations of functionality, durability, resilience, ease of upgrading, expansion and recyclability.

1.2.3. Resilience Planning

The project shall be designed to withstand clear foreseeable hazards. Project planning and design as well as applicable infrastructure operation and maintenance plans shall consider all possible sources of stress and shocks and include applicable measures to prepare for short-term plausible hazards while taking into account the effects of climate change that could occur over the long term. Such planning exercises should carefully consider green infrastructure practices together with infrastructure asset protection over time.

1.2.4. Supply Chain

The project owner shall require relevant third parties, whether contractors, subcontractors or suppliers to take reasonable steps to ensure compliance with sustainability and resilience requirements specified in this standard, including (but not limited to) the following themes - Human Rights (2.1), Labour Rights and Working Conditions (2.2.), Environmental Protection (3.3) and Natural Resources (3.4). Appropriate processes shall be established to monitor supply chain risks and to encourage performance improvements in line with set targets throughout the project lifecycle. Such processes should also cover sustainable procurement and purchasing best practices during project delivery. Beside a clear commitment, suppliers shall be identified, evaluated and awarded contracts based on adequate sustainability information and documented evidence.

1.2.5. Innovation

The project owner shall promote the use of innovative approaches to meet sustainability and resilience objectives and deliver related benefits. When considering their use, careful consideration should be given to cost effectiveness and technology maturity as well as to the contribution to more sustainable livelihoods.

1.2.6. Pre-existing Liabilities

If the project is connected to pre-existing social, economic or environmental grievances, the project owner shall transparently address and remedy such legacies in collaboration with affected parties (or stakeholders).

1.3. Stakeholder Engagement

The infrastructure project shall be developed and operated based on consultation and engagement of all relevant stakeholder groups.

1.3.1. Stakeholder Identification and Engagement Planning

The project owner shall identify a comprehensive list of stakeholders that may be interested in and/or affected by the project including project users and beneficiaries and other affected communities.

The project owner shall establish and implement a sound stakeholder engagement plan based on identified issues upon which feedback from the stakeholders is required. Non-negotiable issues shall be kept to a minimum and stakeholders informed accordingly.

Stakeholder engagement shall be documented appropriately and reported upon to senior management. Furthermore, engagement should be timed to start ahead of project planning whenever possible and continue throughout the life cycle of the project.

1.3.2. Engagement and Participation

The project owner shall establish a process of fair, representative and non-discriminatory consultation with relevant stakeholders including project users, beneficiaries and otherwise affected communities and in collaboration with host governments where appropriate. The process should allow stakeholders to express their views on project risks, impacts and mitigation measures, and should provide appropriate time for the project owner to consider and respond to these.

For projects with potentially significant adverse impacts on affected communities, the process shall be formalised into an Informed Consultation and Participation (ICP) process. Such ICP shall involve a more in-depth exchange of views and information and an organised and iterative consultation. The project owner should then incorporate into project decision-making processes the views of affected communities on matters that affect them directly.

1.3.3. Communication

Adequate communication shall be made on a regular and continuous basis with relevant stakeholders and members of the public. Communication shall be provided in languages and formats appropriate to the target audience. Communication should cover relevant disclosure of risks, impacts and opportunities in relation to the project as well as relevant project reports in accordance with relevant SuRe® requirements (see 1.1.9).

1.3.4. Public Grievance Redress Mechanism

The project owner shall establish an efficient and inclusive grievance mechanism to facilitate the prompt resolution of public concerns and grievances about its environmental and social performance. Such grievance mechanism should be scaled to the identified risks and adverse impacts of the project and be open to affected communities to use. It should seek to resolve concerns promptly, using an understandable and transparent consultative process that is culturally appropriate and readily accessible, and at no cost and without retribution to the party that originated the issue or concern. The mechanism shall not impede access to judicial or administrative remedies.

1.3.5. Political Buy-in

The project shall be backed up and supported by different political constituencies (including the opposition) to increase its stability over political cycles.

1.4. Anti-corruption and Transparency

The project owner shall not engage in and/or tolerate corruption and bribery when planning, developing and/or operating the infrastructure project.

1.4.1. Anti-corruption Programme

The project owner shall develop and implement a comprehensive anti-corruption programme for the project reflecting as a minimum the principles included in international voluntary standards such as the Transparency International Business Principles for Countering Bribery or an equivalent instrument. Such a programme shall effectively include:

(a) the identification of corruption risks
(b) the implementation of appropriate measures and processes to manage and mitigate such risk
(c) the thorough investigation of cases where corruption is suspected to have taken place
(d) the implementation of appropriate corrective measures to address any cases of corruption.
The programme shall specify internal reporting and public disclosure procedures and be enforceable on all parties involved in the infrastructure project using an Integrity Pact or equivalent.

1.4.2. Tender Transparency

The ultimate beneficial owner of enterprises participating in public tenders for infrastructure development shall be publicly disclosed.

1.4.3. Financial Transparency

The project owner shall, and shall effectively ensure that all parties involved in the infrastructure project shall, publicly disclose:
(a) All political and charitable contributions, and shall refrain from making political contributions during election campaigns
(b) All payments made to governments on a country-by-country basis
(c) Its holdings of subsidiaries, affiliates, joint ventures and other related entities
(d) Community contributions in all countries where it operates
Such disclosure shall comply with applicable international law and reputable international standards and guidance such as FATF's National Money Laundering and Terrorist Financing Risk Assessment.

2. Society

2.1. Human Rights

The infrastructure shall be developed and operated in respect of human rights as set out in the Universal Declaration on Human Rights (UDHR, 1948).

2.1.1. Human Rights Commitment

The project owner and its contractors shall protect, promote and respect human rights and comply with applicable national and international human rights laws (e.g. UDHR, 1948). The project owner should consider implementing relevant voluntary standards such as the UN Guiding Principles on Business and Human Rights, and ISO 26000 - Social Responsibility. The project owner shall ensure that human rights are adequately taken into account in project policies and that compliance with human rights is appropriately documented.

2.1.2. Disclosure of Human Rights Violations

The project owner shall publicly disclose any incident of human rights violations related to the project seeking certification, and report on actions taken to promptly remedy such violations in accordance with applicable international standards (e.g. ISO 26000). If any human rights violations have been claimed in the last five years, the project owner shall provide evidence of how such claims have been investigated promptly, thoroughly and in good faith. The same requirements shall apply to contractors.

2.1.3. Human Rights Violations

The project owner has not been found guilty (i.e., final verdict of guilty after exhausting all appeals) of a violation of human rights for any of its activities in the country of operation within the previous three years. The same requirements shall apply to contractors.

2.1.4. Human Rights and Security Personnel

The project owner shall ensure that security forces hired to provide security services in and around the project behave in compliance with applicable human rights laws and respect the human rights of workers, contactors and communities.

2.1.5. Gender Equality

The project owner should actively promote gender equality throughout the project, including in relation to the socioeconomic impacts of the project on local communities and users. References to gender equality should be made in all relevant project policies covering, for example, aspects such as equal pay as well as access to, and job protection during, parental leave.

2.2. Labour Rights and Working Conditions

The rights of workers shall be recognised and respected throughout the life cycle of the project and in accordance with ILO Core Standards as set in the ILO Declaration on Fundamental Principles and Rights at Work (1998). The term 'workers' refers to direct workers, contracted workers, supply chain workers and migrant workers.

2.2.1. Employment Policy

The project owner shall develop employment policies in accordance with applicable national and international laws and in line with SuRe® and other relevant international standards (e.g. ISO 26000 - Social Responsibility).

2.2.2. Right to Association and Collective Bargaining

The project owner shall respect workers' freedom of association and collective bargaining, including in countries where national law is either silent or restrictive on the subject and in accordance with national implementation of ILO Core Standards.

2.2.3. Non-discrimination

The principles of equal opportunity and non-discrimination on the grounds of race, colour, gender, sexual orientation, language, religion, national or social origin, or political or other opinion shall be respected and enforced throughout the project.

2.2.4. Forced Labour and Child Labour

The project owner shall not resort to any form of forced labour or child labour and shall comply with all applicable national and international laws.

2.2.5. Occupational Health and Safety

The project owner shall provide a safe and healthy working environment, in accordance with applicable international standards such as the ILO standards. The project owner shall identify and assess risks and potential hazards relating to the project, type of infrastructure, location and region. Preventive and protective measures shall be implemented to minimise the causes of such hazards and prevent their occurrence as far as reasonably practicable. Any occupational accidents, diseases and incidents shall be documented and reported in accordance with applicable laws and recognised standards.

2.2.6. Employee Grievance Mechanism

The project owner shall establish transparent disciplinary procedures and accessible employee grievance mechanisms to register, investigate and promptly address any complaints arising during the life cycle of the project. Such procedures and mechanisms shall comply with applicable national and international law including, where relevant, applicable international standards (e.g. ILO standards).

2.2.7. Working Hours and Leave

Fair working hours, rest days and legally mandated leave shall be respected in accordance with applicable national and international law, as well as recognised international standards and best practice (e.g. ILO standards on working time).

2.2.8. Fair Wages and Access to Employee Documentation

Workers shall be paid fair wages, considering both the applicable legal minimum wage plus associated statutory benefits, or the prevailing industry standards and taking the higher of the two. Workers shall have easy and free access to their personal employee documentation in accordance with applicable national and international law, as well as recognised international standards on the subject.

2.2.9. Retrenchment

Should the project resort to retrenchment at any time during the life cycle of the infrastructure asset, such retrenchments shall be implemented as a last resort and in the absence of any viable alternative. Retrenchments shall be carried out without discrimination, in accordance with contractual requirements and in compliance with applicable national and international laws. Adequate retrenchment procedures should be established from the start of the project and cover notification and compensation (including severance and benefits) in accordance with applicable laws and industry best practice.

2.3. Customer Focus and Inclusiveness

The project shall meet the needs of the identified users and beneficiaries without discrimination as identified through appropriate verification.

2.3.1. Accessibility

The infrastructure and related services shall be accessible to all intended users and beneficiaries, without discrimination on the grounds of race, gender, sexual orientation, language, religion, national or social origin, political or other opinion. The needs of the elderly and disabled should be carefully considered through appropriate engagement particularly where such infrastructure is to be accessed by the public.

2.3.2. Infrastructure Adequacy and Service Improvement

The project owner, contractors and operators shall regularly engage with the intended users (where applicable) and beneficiaries of the infrastructure to ensure the adequacy of the infrastructure and related services. Such engagement should also cover the design of quality indoor and outdoor environments in relation to users' comfort during the planning phase. Once the infrastructure is operational, the service provider shall establish a customer-friendly complaint mechanism and related processes to act upon complaints within a reasonable timeframe.

2.4. Community Impacts

The project development and/or operation shall not negatively impact the community residing in the vicinity, including indigenous people and historically disadvantaged groups. When avoidance is not achievable, the mitigation hierarchy (minimisation, restoration, compensation) shall be applied.

2.4.1. Minorities and Indigenous People

If the project is on, or may affect, land or resources traditionally owned or under the customary use of indigenous people and minorities, the project owner shall consult with previously identified affected communities on the project design and anticipated outcomes and obtain their Free, Prior and Informed Consent (FPIC). Any adverse impacts should be promptly identified and remedies should be proposed in accordance with the mitigation hierarchy.

Minorities are intended as minority groups based on national or ethnic, cultural, religious and linguistic identity. For the purposes of this standard, minorities shall specifically include nomadic communities, Roma, and other national or regional minorities.

2.4.2. Resettlements

The project owner shall commit to avoid involuntary resettlement of affected communities, including indigenous people, wherever possible. Alternative project designs shall be considered in order to avoid or minimise the displacement of people and/or related socioeconomic activities, while balancing environmental, social and financial costs and benefits. Where resettlement is unavoidable, the project owner shall engage with affected communities on the development of a resettlement action plan and offer adequate compensation as part of it. Such engagement shall be properly documented and be fair, inclusive and in compliance with applicable human rights laws.

2.4.3. Cultural Heritage

The project owner shall comply with applicable law on the protection of cultural heritage throughout the life cycle of the project and infrastructure asset. Applicable law includes the host country's obligation under the Convention Concerning the Protection of the World Cultural and Natural Heritage (UNESCO CCPWCNH, 1972). Any risk of impacts on (or findings of previously undiscovered) cultural heritage shall be promptly identified and assessed by qualified professionals. Where such risks exist, the project owner shall explore alternatives to project design and execution and consult with affected communities on appropriate courses of action. Such engagement shall be properly documented and reported upon as appropriate.

2.4.4. Public Health and Safety

The project owner shall evaluate all potential risks and impacts to the health and safety of the affected communities and general public during the project life cycle. Where such risks and associated negative impacts are identified, the project owner shall establish preventive and control measures consistent with good international industry practice. The project owner shall identify risks and impacts and propose mitigation measures that are commensurate with their nature and magnitude. Such measures should favour the avoidance of risks and impacts over minimisation.

The following aspects should be carefully considered where relevant, and documented accordingly:

(a) Infrastructure and equipment design and safety

(b) Hazardous materials management and safety

(c) Exposure to diseases

(d) Emergency preparedness and response in line with applicable SuRe® requirements (see e.g. 3.1.5).

2.4.5. Risks to Future Generations

The project owner shall consider the interests of future as well as present generations throughout the life cycle of the project, in particular their health and safety with respect to hazardous waste and other adverse impacts on natural capital associated with the infrastructure over time (including decommissioning).

2.5. Socioeconomic development

The project shall create long-term benefits for socioeconomic development and improvement of quality of life of local communities.

2.5.1. Transformative Potential

The project has the potential to transform how a certain type of infrastructure and related services are designed, built or operated with positive gains in terms of community-scale sustainability and resilience, and based on appropriate benchmarks (for example infrastructure- or location-specific).

2.5.2. Community Benefits

The infrastructure project shall meet the needs of local communities (including minorities, low income and other vulnerable groups) as identified during appropriate assessments, and achieve sustainable and resilience objectives over the long term. In particular, the project shall contribute to creating sustainable livelihoods by improving the quality of life of local communities through increased capacity and improved service reliability, improved liveability, by using technology and approaches that avoid lock-in in unsustainable paths, and by strengthening social cohesion.

2.5.3. Access to Critical Infrastructure and Poverty Responsiveness

Where the infrastructure addresses basic needs of the population or is considered to constitute critical infrastructure for local communities, the project shall carefully consider the accessibility and affordability to historically disadvantaged groups including low-income and poorer groups of the population. Critical infrastructure services include (but are not limited to) access to water and sanitation, energy, public transport, education, and healthcare.

2.5.4. Enhancement of Public Space

The project shall contribute positively to public space preservation and enhancement in order to strengthen social cohesion. Where the project is located near to or on public space, the project owner shall seek to preserve public space and amenities or provide alternatives at least equivalent in nature and scope. Where there is no public space, the project owner shall carefully consider creating public space and related amenities where appropriate and based on engagement with local communities.

2.5.5. Infrastructure System Integration

The project shall be integrated to wider infrastructure systems and possible synergies shall be identified where relevant. System integration should be encouraged both within types of infrastructure (e.g. integrated waste management systems, integrated transport infrastructure) but also within areas (e.g. infrastructure located underground such as transport, district heating, telecommunications, water and sewage pipes) in order to improve project and wider infrastructure performance and efficiencies. Integration should be aligned to local public policy plans but also arise from engaging and cooperating with other applicable projects where synergies exist.

2.5.6. Development of Local Skills and Capabilities

The project owner and team shall seek to support positive skill, technology and capability spillovers from the project to the community where relevant and applicable. For example, by hiring local staff, including from minority groups, and by training them accordingly or by sharing knowledge and learning outcomes with interested parties as part of wider development programmes.

2.5.7. Socioeconomic Development

The infrastructure project shall seek to contribute to local socioeconomic development priorities as identified in project documents and aligned with local, regional and national development goals as well as international ones (for example the Sustainable Development Goals).

Local development priorities should include but are not limited to local employment creation and economic development through technology transfer and capacity building. The project should consider socioeconomic development throughout the life cycle of the project and beyond.

3. Environment

3.1. Climate

The project shall be designed and operated to avoid negative impacts on climate change, and create net positive outcomes wherever possible.

3.1.1. Greenhouse Gas Emissions

The project owner shall seek to lower greenhouse gas emissions related to the infrastructure development and operation, compared to applicable benchmarks and baselines and in accordance with the UN Framework Convention on Climate Change (UNFCCC, 1994) and related protocols. Where possible, the infrastructure, particularly if newly built, should aim to become carbon neutral or to achieve very low levels of emissions.

Greenhouse gas emissions in the context of infrastructure include direct and indirect emissions, including emissions released from carbon sinks following land use changes caused by the project.

The project owner shall consider alternatives and implement cost-effective options that are both technically and financially viable in order to reduce project-related greenhouse gas emissions during the construction and operation of the project. These options may include alternative project locations, adoption of renewable or low carbon energy sources, sustainable agricultural, forestry and livestock management practices, the reduction of fugitive emissions and the reduction of gas flaring.

3.1.2. Energy Efficiency

The project owner shall maximise energy savings and energy efficiency during construction and operation. The project should commit from the design phase to explore options to reduce energy consumption where relevant and feasible. Energy audits shall be carried out regularly during operation to confirm expected energy savings in comparison with industry norms. Consideration should also be given to reducing the project's embodied energy over the infrastructure lifespan as part of a life cycle energy assessment.

3.1.3. Renewable Energy

The project owner shall maximise the use of sustainably managed renewable energy as a proportion of total energy consumption.

3.1.4. Climate Resilience and Infrastructure Adaptability

The project owner shall factor in climate and resilience in the project life cycle by carrying out a vulnerability assessment, even more so if the project is considered to be 'high risk'. Infrastructure projects located in risk-affected sectors (e.g. agriculture, water, hydropower) and/or in high-risk areas (e.g. coastal areas) are considered as ‘high risk’.

Where the project is expected to be or already is at risk due to climate change impacts, the project owner shall incorporate adaptation measures into the project design. Where the project is expected to have an impact on the vulnerability of the wider system, the project owner should seek to mitigate if not avoid causing such impacts. The project owner should consider any other additional opportunities to achieve resilience, climate and other co-benefits, where relevant and feasible to do so.

3.1.5. Emergency Preparedness

The project owner shall implement an emergency management plan. Such a plan should cover disaster risk reduction and response as well as emergency preparedness. Risk assessments should promptly identify disaster risk and opportunities for risk reduction and prevention, particularly during the planning phase and in accordance with SuRe® requirements on resilience planning (see 1.2.3). Processes and equipment related to emergency preparedness should prioritise worker health and safety and comply with applicable national laws and international standards.

3.1.6. Ozone Depletion

The project shall avoid contributing to ozone depletion. The use of Ozone Depleting Substances (ODS) should be assessed, reported, monitored and disclosed in accordance with international law throughout the life cycle of the infrastructure. The project owner shall seek to reduce if not eliminate the use

of ODS in line with the Phase-out Management Plan noted in the Montreal Protocol on Substances that Deplete the Ozone Layer (1989, universally ratified).

3.2. Biodiversity and Ecosystems

The infrastructure project shall be designed in a way so as to integrate ecosystem services as a part of the planned infrastructure function as far as possible, and to avoid negative impacts on biodiversity and ecosystems, and wherever possible identify potential for further positive impacts, in accordance with the Convention on Biological Diversity and related protocols.

3.2.1. Biodiversity and Ecosystem Management

The project and associated developments shall seek to avoid negative impacts and maximise positive impacts on conservation of biodiversity, natural habitats, ecological corridors and ecosystems which could arise from the infrastructure project as much as possible. Possible direct and indirect impacts should be assessed by referring to internationally recognised approaches (for example the High Conservation Values (HCV) assessment approach).

Where negative direct or indirect impacts on biodiversity and ecosystem services cannot be avoided, the project owner shall seek to minimise impacts and implement restoration measures in accordance with a 'zero net loss' approach, based on the mitigation hierarchy and following consultation with affected communities.

3.2.2. Habitat and Ecosystem Conservation

The project owner and team shall seek to protect natural capital, including habitats and ecosystems, in close collaboration with state and local agencies as well as local communities. In addition to SuRe® requirements on biodiversity and ecosystem management, the project shall insofar as possible not be built or cause negative impacts on:

(a) Critical habitats and endangered species as per recognised international approaches (e.g. IUCN's Red List)

(b) Legally protected and internationally recognised areas

(c) Other areas of high conservation value (e.g. wetlands, rivers) as identified through internationally recognised approaches (e.g. HCVA).

Where this cannot be avoided, a 'zero net loss' approach shall be favoured and include adequate compensation measures for any affected communities, in accordance with applicable law and international standards.

3.2.3. Forest Restoration and Conservation

The project should achieve 'zero net loss' of forests. Any impacts on existing forests should be minimised and mitigated according to the mitigation hierarchy. Where deforestation is unavoidable and forests are cleared for the project, at least an equivalent area should be afforested/reforested.

3.2.4. Invasive Alien Species

The project owner shall avoid the deliberate or accidental introduction of alien or non-native species of flora and fauna into areas where they are not normally found.

3.3. Environmental Protection

Infrastructure development and operation shall minimise negative impacts and maximise positive impacts on the environment, including ecosystems and biodiversity. The mitigation hierarchy (avoid, prevent, minimise, reduce or offset adverse impacts) shall be applied.

3.3.1. Waste

Waste generation, in particular hazardous waste, shall be avoided where possible, and waste shall otherwise be minimised, treated, destroyed, or disposed in a safe and environmentally sound manner. A waste management plan should be implemented throughout the life cycle of the project.

3.3.2. Pollution

The project shall be designed, implemented and operated in a way to avoid or minimise the pollution of air, water and soil and to avoid the transfer of pollution from one of these environmental components to the other.

Where it is not possible to avoid adverse impacts, the project owner shall consider ambient conditions and apply technically and financially feasible pollution prevention principles and techniques that are best suited to minimise adverse impacts on human health and the environment, consistent with applicable laws and standards as well as good international industry practice.

3.3.3. Pest Management

The project shall not use any pesticides listed under applicable international conventions such as the Rotterdam Convention (2004) and the Stockholm Convention on Persistent Organic Pollutants (2004).

Where the project involves the management of pesticides and relates substances, an integrated pest management (or vector management) approach should be considered. The project should seek to minimise and mitigate any adverse impacts related to the use of such substances on local ecosystems and biodiversity as well as public health and safety, in accordance with the relevant SuRe® requirements.

3.3.4. Noise, Light and Vibration

The infrastructure shall be designed, implemented and operated in a way that minimises negative impacts on human and ecosystem health related to emissions of noise, light and vibrations. Prevention and mitigation measures should be implemented where appropriate. Stakeholder engagement is recommended for projects and types of infrastructure where such emissions are significantly high.

3.3.5. Heat Management

The project owner shall identify all potential sources of excessive heat associated with the project (e.g. hot water) and with which people or wildlife could come into contact. Such assessment should also identify surfaces with a low solar reflectance index and consider the use of alternative materials and the implementation of mitigation measures where appropriate. The project owner shall implement measures to isolate heat sources and minimise associated risks to the community, domestic animals and wildlife, and where possible evaluate the potential for waste heat recovery and reuse.

3.4. Natural Resources

The development and operation of the infrastructure shall aim to protect natural resources and commit to responsible sourcing.

3.4.1. Resource Efficiency

The infrastructure shall be designed to maximise resource efficiency throughout its life cycle. The project owner shall implement technically and financially feasible measures for improving efficiency in relation to the consumption of energy, water, as well as any other applicable resources and material inputs. Such measures should integrate the principles of cleaner production into project design and construction with the objective of conserving raw materials, energy, and water. Where benchmarking data is available the project owner shall establish relative levels of efficiency.

3.4.2. Fossil Fuel Dependency

The project shall minimise dependency on fossil fuel inputs. Particular consideration should be given to this issue during the design and planning phase. Where fossil fuel inputs are used, resource efficien-

cy targets should be established in accordance with industry norms or in comparison with baseline data.

3.4.3. Preservation of Water Resources

The project shall operate with water resources that maintain sustainable water balances and exhibit consistent and socially acceptable water quality levels. Accordingly, the project owner and team should preserve water resources during the project's design, construction and operation. In particular, losses in water supply should be reduced in comparison to business as usual or applicable industry norms. Further, the project should avoid using or impacting on non-replenishable water resources, limit storm runoffs, and monitor closely water usage performance where applicable.

3.4.4. Materials

The project owner shall commit to the sustainable sourcing of materials in order to minimise their life cycle impact in accordance with internationally recognised standards such as LEED's requirements on building materials and material-specific standards such as FSC for wood. The project should seek to favour low-impact and non-hazardous materials, which are locally sourced and made from reclaimed or recycled materials where possible. The project should also identify and take advantage of by-product synergies where cost-effective and feasible to do so. The project should refrain from purchasing products from regions where there are significant social and environmental risks.

3.4.5. Cumulative Impacts

The project owner shall consider cumulative impacts of project activities on the environment and manage them appropriately. Cumulative impacts are the negative public health or environmental effects from exposure to the combined emissions and discharges in a geographic area. Such impacts should be assessed carefully and measures should be implemented in accordance with recognised guidance on the subject such as the IFC's Good Practice Handbook on Cumulative Impact Assessment and Management: Guidance for the Private Sector in Emerging Markets.

3.5. Land Use and Landscape

The infrastructure project shall minimise negative impacts on the surrounding landscape and use land responsibly.

3.5.1. Location

The project owner shall conduct a comprehensive location analysis in order to identify a suitable project location where negative impacts can be kept to a minimum. Such assessment should carefully consider landscape scale planning and conservation, local geological considerations, the presence of green infrastructure as well as the implications of slopes and flood plains. Projects should not be built or negatively impact on protected areas, natural reserves and/or cultural heritage sites in accordance with the applicable SuRe® requirements (see 3.2.2 and 2.4.3).

3.5.2. Land Use

The project shall minimise land use and urban sprawl by favouring grey fields in order to preserve green fields (including farm land) and minimise impervious surfaces.

3.5.3. Soil Restoration

Soils disturbed during construction and previous development shall be restored. Restoration should allow such soils to be reused for functions comparable to their original ecological and hydrological functions.

3.5.4. Project Siting and Design in Relation to Landscape

The project owner shall carefully assess infrastructure siting, in consultation with affected communities. Such assessment should cover:

(a) the identification of how landscape and local communities will be affected by the project in terms of landscape scale planning, features, character and aesthetics;
(b) the evaluation of how vulnerable or sensitive the landscape is and will be to the likely effects of the project (including increased pressure on frontier resources and activity displacement if any);
(c) suggestions for integrated design and operational features that minimise or mitigate the impacts of the project on landscape.
The project shall avoid any detrimental impacts on landscapes that are of significant economic, environmental, cultural and spiritual value to local communities (including Indigenous People and minorities).

4 Appendices and References

4.1 Overview of references to existing conventions, standards and guidelines

Figure 5 below lists the international conventions, standards and guidelines that are directly referenced in the SuRe® Criteria.

Figure 5 - Documents directly referenced in SuRe® criteria

SuRe® Criterion	Referenced Document(s)
1.4.1 - Anti-corruption Programme	Transparency International Business Principles for Countering Bribery
1.4.3 - Financial Transparency	FATF National Money Laundering and Terrorist Financing Risk Assessment (2013)
1.1.10 - Financial Sustainability	World Bank Template and Guidelines for the Project Appraisal Document (PAD)
2.1 - Human Rights	ISO 26000 - Social Responsibility Universal Declaration on Human Rights (UDHR, 1948) UN Guiding Principles on Business and Human Rights
2.2 - Labour Rights and Working Conditions	ILO Declaration on Fundamental principles and Rights at Work (1998) ILO standards
2.4.2 - Cultural Heritage	Convention Concerning the Protection of the World Cultural and Natural Heritage (UNESCO CCPWCNH, 1972)
2.5.7 - Socioeconomic Development	UN Sustainable Development Goals
3.1.1 - Greenhouse gas emissions	UN Framework Convention on Climate Change (UNFCCC, 1994)
3.1.6 - Ozone Depletion	Montreal Protocol on Substances that Deplete the Ozone Layer (1989)
3.2 Biodiversity and Ecosystem (theme)	Convention on Biological Diversity (CBD, 1993)
3.2.1 - Biodiversity and Ecosystem Management	High Conservation Values assessment approach
3.2.2 - Habitat and Ecosystem Conservation	IUCN Red List
3.3.3 - Pest Management	Rotterdam Convention (2004) Stockholm Convention on Persistent Organic Pollutants (2004)
3.4.5 - Cumulative Impacts	IFC Good Practice Handbook on Cumulative Impact Assessment and Management: Guidance for the Private Sector in Emerging Markets

Figure 6 illustrates how SuRe® Criteria and performance levels take into consideration, and where applicable build upon, existing standards, notably:

- Equitable Origin (EO)
- Envision® (Env)
- GIB's Grading Tool (GIB GT)
- IFC's Performance Standards (IFC PS)
- ISCA's Infrastructure Sustainability rating scheme (ISCA IS)
- Transparency International (TI)

Note - At the time of writing and following comments received during the public consultation, the SuRe® Standard Committee is currently reviewing all performance levels to ensure that these are consistent and coherent for all SuRe® Criteria. Further information on criteria interpretation and performance assessment will be provided in an Auditors' handbook to be published in 2016.

Figure 6 - SuRe®'s consideration of existing standards

Code	SuRe® Criterion	EO	Env	GIB GT	IFC PS	ISCA IS	TI
1.1.1	Organisational Structure and Management			x		x	
1.1.2	Decision-making			x			
1.1.3	Team Qualifications, Know-how and Capacity building			x			
1.1.4	Continuous Knowledge Sharing					x	
1.1.5	Legal Compliance and Oversight	x					
1.1.6	Results Orientation			x			
1.1.7	Risk Management					x	
1.1.8	Interconnectivity and System Thinking		x				
1.1.9	Reporting and Disclosure					x	
1.1.10	Financial Sustainability						
1.2.1	Environmental and Social Management System				x		
1.2.2	Life Cycle Approach		x		x		
1.2.3	Resilient Planning[4]		x			x	
1.2.4	Sustainable Procurement				x	x	
1.2.5	Innovation			x			
1.2.6	Pre-existing Liabilities						
1.3.1	Stakeholder Identification and Engagement Planning				x	x	
1.3.2	Engagement and Participation				x	x	
1.3.3	Communication				x		
1.3.4	Public Grievance Redress Mechanism	x			x		
1.3.5	Political Buy-in						
1.4.1	Anti-corruption Programme						x
1.4.3	Tender Transparency						x
1.4.4	Transparency of Financial Relations						x
2.1.1	Human Rights Commitment	x					
2.1.2	Disclosure of Human Rights Violations	x					
2.1.3	Human Rights Violations	x					
2.1.4	Human Rights and Security Personnel				x		
2.1.5	Gender Equality						
2.2.1	Employment Policy				x		
2.2.2	Right to Association and Collective Bargaining	x			x		
2.2.3	Non-discrimination	x			x		
2.2.4	Forced Labour and Child Labour				x		

[4] 1.2.3 also considers Arup's Cities Resilience Framework.

Code	SuRe® Criterion	EO	Env	GIB GT	IFC PS	ISCA IS	TI
2.2.5	Occupational Health and Safety				x		
2.2.6	Employee Discipline and Grievance Mechanism				x		
2.2.7	Working Hours and Leave	x			x		
2.2.8	Fair Wages and Access to Employee Documentation	x					
2.2.9	Retrenchment				x		
2.3.1	Accessibility						
2.3.2	Infrastructure Adequacy and Service Improvement			x			
2.4.1	Minorities and Indigenous People				x		
2.4.2	Resettlements				x		
2.4.3	Cultural Heritage				x		
2.4.4	Public Health and Safety				x		
2.4.5	Risks to Future Generations						
2.5.1	Transformative Potential						
2.5.2	Community Benefits		x	x			
2.5.3	Access to Critical Infrastructure and Poverty Responsiveness						
2.5.4	Enhancement of Public Space		x				
2.5.5	Infrastructure System Integration		x			x	
2.5.6	Development of Local Skills and Capabilities		x	x			
2.5.7	Socioeconomic Development	x	x	x			
3.1.1	Greenhouse gas emissions		x		x		
3.1.2	Energy Efficiency		x			x	
3.1.3	Renewable Energy		x			x	
3.1.4	Climate Resilience and Infrastructure Adaptability						
3.1.5	Emergency Preparedness	x					
3.1.6	Ozone Depletion	x					
3.2.1	Biodiversity and Ecosystem Management				x		
3.2.2	Habitat and Ecosystem Conservation		x		x		
3.2.3	Forest Restoration and Conservation						
3.2.4	Invasive Alien Species				x		
3.3.1	Waste				x		
3.3.2	Pollution		x		x		
3.3.3	Pest Management				x		
3.3.4	Noise, Light and Vibration	x					
3.3.5	Heat Management	x	x				
3.4.1	Resource Efficiency				x		
3.4.2	Fossil Fuel Dependency						

Code	SuRe® Criterion	EO	Env	GIB GT	IFC PS	ISCA IS	TI
3.4.3	Preservation of Water Resources		x			x	
3.4.4	Materials		x		x	x	
3.4.5	Cumulative Impacts	x					
3.5.1	Location		x				
3.5.2	Land Use[5]		x				
3.5.2	Soil Restoration		x				
3.5.4	Project Siting and Design in Relation to Landscape	x					

4.2 Definitions

Keyword	Definition	*Reference*
Auditor	A person who audits infrastructure projects to determine their level of SuRe compliance, in a manner befitting the training received from GIB.	
Affected Communities	Local communities directly affected by the project.	*According to IFC PS1, Par1, pg 1*
Assimilative Capacity	The capacity of the environment for absorbing an incremental load of pollutants while remaining below a threshold of unacceptable risk to human health and the environment.	*According to IFC PS 3, page 3*
Basic Services	Basic services requirements refer to minimum space, supply of water, adequate sewage and garbage disposal systems, appropriate protection against heat, cold, damp, noise, fire and disease-carrying animals, adequate sanitary and washing facilities, ventilation, cooking and storage facilities and natural and artificial lighting, and in some cases basic medical services.	*IFC PS 2, page 3*
Biodiversity	The variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species, and of ecosystems.	*According to the Convention on Biological Diversity, in IFC PS 6 Par1, page 1*
Biodiversity Offset	Biodiversity offsets are measurable conservation outcomes resulting from actions designed to compensate for significant residual adverse biodiversity impacts arising from project development and persisting after appropriate avoidance, minimisation and restoration measures have been taken.	*According to IFC 6, pg 2*
Brownfields	Abandoned or underused industrial and commercial sites usually containing low levels of environmental pollution, such as hazardous waste or industrial by-products. Brownfield sites have the potential to be reused once they are cleaned up, but cleaning the contamination may pose regulatory and monetary challenges. Brownfield sites are typically located in areas with existing infrastructure, which makes them more sustainable sites for development than Greenfield sites.	*According to Envision® (2012: 168)*

[5] 3.5.2 also considers BREEAM Communities Tool

Keyword	Definition	*Reference*
Buffer Zone	A zone that lies between two or more areas in order to segregate them to enhance the protection of areas under management, typically for their biodiversity importance. Buffer zones may be around the periphery of an area or may connect two or more protected areas. Buffer zones are intended to mitigate negative environmental or human influences in areas of greater ecological value.	*Envision® (2012: 168)*
By-product Synergy	By-Product Synergy (BPS) is the matching of undervalued waste or by-product streams from one facility with potential users at another facility to create new revenues or savings with potential social and environmental benefits. The resulting collaborative network creates new revenues, cost savings, energy conservation, reductions in the need for virgin source materials, and reductions in waste and pollution, including climate-changing emissions. These are quantifiable benefits to the environment, economy and communities.	*Envision® (2012: 168)*
Co-benefit	Non-climate benefits of green house gas mitigation policies that are explicitly incorporated into or result from mitigation policies.	*IPCC (2014)*
Contractor	An organisation or individual that contracts with the infrastructure project owner for the provision of a service, e.g. construction.	*Inspired by wikipedia definition.*
Collective Dismissal	Multiple dismissals that are a result of an economic, technical, or organisational reason or other reasons that are not related to performance or other personal reasons.	*IFC PS2 (2012: 4)*
Critical Habitat	Critical habitats, also known as hot spots, are areas with high biodiversity value, including (i) habitats of significant importance to critically endangered and/or endangered species; (ii) habitats of significant importance to endemic and/or restricted-range species; (iii) habitats supporting globally significant concentrations of migratory species and/or congregatory species; (iv) highly threatened and/or unique ecosystems; and/or (v) areas associated with key evolutionary processes.	*IFC PS6 (2012: 4)*
Critical Cultural Heritage	Critical cultural heritage consists of one or both of the following types of cultural heritage: (i) the internationally recognised heritage of communities who use, or have used within living memory the cultural heritage for long-standing cultural purposes; or (ii) legally protected cultural heritage areas, including those proposed by host governments for such designation.	*IFC (2012)*
Cultural Heritage	Cultural heritage refers to (i) tangible forms of cultural heritage, such as tangible moveable or immovable objects, property, sites, structures, or groups of structures, having archaeological (prehistoric), paleontological, historical, cultural, artistic, and religious values; (ii) unique natural features or tangible objects that embody cultural values, such as sacred groves, rocks, lakes, and waterfalls; and (iii) certain instances of intangible forms of culture that are proposed to be used for commercial purposes, such as cultural knowledge, innovations, and practices of communities embodying traditional lifestyles.	*IFC PS8 (2012: 1)*

Keyword	Definition	*Reference*
Design Freeze	Completion and client's final approval of the design and associated processes i.e. no further changes are contemplated or accepted within the budget approved in the project brief	*Chartered Institute of Building (2014)*
Displaced Persons	Displaced persons may be classified as persons (i) who have formal legal rights to the land or assets they occupy or use; (ii) who do not have formal legal rights to land or assets, but have a claim to land that is recognised or recognisable under national law; or (iii) who have no recognisable legal right or claim to the land or assets they occupy or use. The census will establish the status of the displaced persons. Project-related land acquisition and/or restrictions on land use may result in the physical displacement of people as well as their economic displacement, so physical displacement and economic displacement may occur simultaneously.	*IFC, PS5 (2012: 5)*
Ecosystem Services	The benefits that people, including businesses, derive from ecosystems. Ecosystem services are organised into four types: (i) provisioning services, which are the products people obtain from ecosystems; (ii) regulating services, which are the benefits people obtain from the regulation of ecosystem processes; (iii) cultural services, which are the non-material benefits people obtain from ecosystems; and (iv) supporting services, which are the natural processes that maintain the other services.	*IFC PS 6 (2012: 1)*
Embodied Energy	The embodied energy of a material or product is the sum of energy that was used in the production of the material or product, including raw material extraction, transport manufacture and all the undertaken processes until the material or product is completed and ready.	*Envision® (2012: 170)*
Environmental and Social Management System (ESMS)	An Environmental and Social Management System (ESMS) is a dynamic and continuous process initiated and supported by management, and involves engagement between the project owner, its workers, local communities directly affected by the project (the Affected Communities) and, where appropriate, other stakeholders (i.e. those not directly affected by the project but who have an interest in it). Drawing on the elements of the established business management process of "plan, do, check, and act," the ESMS entails a methodological approach to managing environmental and social risks and impacts in a structured way on an ongoing basis. A good ESMS appropriate to the nature and scale of the project promotes sound and sustainable environmental and social performance, and can lead to improved financial, social, and environmental outcomes.	*IFC PS 1 (2012: 1)*
Forced Eviction	The permanent or temporary removal against the will of individuals, families, and/or communities from the homes and/or lands which they occupy without the provision of, and access to, appropriate forms of legal and other protection.	*IFC PS 5 (2012: 6)*
Free, Prior and Informed Consent (FPIC)	FPIC is understood as expanding the process of Informed Consultation and Participation (ICP) described in Performance Standard 1.3.2. and will be established through good faith negotiations between the project owner and the affected communities of indigenous peoples. The project owner will document: (i) the mutually accepted process between the project owner and Affected Communities of Indigenous Peoples, and (ii) evidence of agreement between the parties as the outcome of the negotiations. FPIC does not necessarily require unanimity and may be achieved even when individuals or groups within the community explicitly disagree.	*IFC PS7 (2012)*
Good International Industry Practice (GIIP)	The exercise of professional skill, diligence, prudence, and foresight that would reasonably be expected from skilled and experienced professionals engaged in the same type of undertaking under the same or similar circumstances globally or regionally.	*IFC PS 1 (2012: 3)*

Keyword	Definition	*Reference*
Green Infrastructure	Green infrastructure is a cost-effective, resilient approach to managing wet weather impacts that provides many community benefits. While single-purpose gray stormwater infrastructure—conventional piped drainage and water treatment systems—is designed to move urban stormwater away from the built environment, green infrastructure reduces and treats stormwater at its source while delivering environmental, social, and economic benefits. Depending on local risks and needs, green infrastructure practices can support climate change resilience by helping to manage flooding, prepare for droughts, reduce urban heat island effect, lower building energy demand and protecting coastal areas.	*US EPA*
Greenfields	Undeveloped land in a city or rural area being considered for infrastructure development. This land may contain natural landscape, natural amenities, or agricultural land.	*Envision® (2012: 171)*
Greyfields	Economically obsolescent, outdated, failing, moribund, and/or underused previously developed land. They are distinct from brownfields in that they typically do not require remediation in order to redevelop, but offer value through existing infrastructure and minimising environmental impact on greenfields.	*Envision® (2012: 171)*
Habitat	A terrestrial, freshwater, or marine geographical unit or airway that supports assemblages of living organisms and their interactions with the non-living environment. Habitats are divided into 'modified', 'natural', and 'critical'. 'Critical' habitats are a subset of modified or natural habitats.	*IFC PS6 (2012: 12)*
Heat Island	An urban area that is significantly warmer than its surrounding rural areas due to materials that cause heat accumulation and lack of vegetation, which cools through evapotranspiration. While the heat island effect has not proven to influence the earth´s global temperatures, it can increase the need for air conditioning and other forms of cooling that require energy.	*Envision® (2012: 172)*
Industry Norms	Current industry regulatory standards for a particular activity.	*Envision® (2012: 172)*
Infrastructure	Infrastructure projects deliver the technical and physical structures (roads, bridges, water supplies and treatment works, dams, and more) required to support the community economy and contribute to the well being of a community. Typically, they are long-lived, expected to last 30-70 years, depending on the type of structure and how it is maintained. In addition, their performance efficiency and effectiveness depends to a large degree on their fit and harmony with other elements of infrastructure, and their collective ability to adapt to change.	*Envision® (2012: 172)*
Involuntary Resettlement	Involuntary resettlement refers both to physical displacement (relocation or loss of shelter) and to economic displacement (loss of assets or access to assets that leads to loss of income sources or other means of livelihood) as a result of project-related land acquisition and/or restrictions on land use. Resettlement is considered involuntary when affected persons or communities do not have the right to refuse land acquisition or restrictions on land use that result in physical or economic displacement. This occurs in cases of (i) lawful expropriation or temporary or permanent restrictions on land use and (ii) negotiated settlements in which the buyer can resort to expropriation or impose legal restrictions on land use if negotiations with the seller fail. Unless properly managed, involuntary resettlement may result in long-term hardship and impoverishment for the Affected Communities and persons, as well as environmental damage and adverse socio-economic impacts in areas to which they have been displaced. For these reasons, involuntary resettlement should be avoided.	*IFC PS 5 (2012: 1)*

Keyword	Definition	*Reference*
Like-for-like or Better	The principle of "like-for-like or better" indicates that biodiversity offsets must be designed to conserve the same biodiversity values that are being impacted by the project (an "in-kind" offset). In certain situations, however, areas of biodiversity to be impacted by the project may be neither a national nor a local priority, and there may be other areas of biodiversity with like values that are a higher priority for conservation and sustainable use and under imminent threat or need of protection or effective management. In these situations, it may be appropriate to consider an "out-of-kind" offset that involves "trading up" (i.e., where the offset targets biodiversity of higher priority than that affected by the project).	*IFC PS6 (2012: 2)*
Livelihood	The full range of means that individuals, families, and communities utilise to make a living, such as wage-based income, agriculture, fishing, foraging, other natural resource-based livelihoods, petty trade, and bartering.	*IFC PS 5 (2012: 1)*
Minorities	Minority groups based on national or ethnic, cultural, religious and linguistic identity. For the scope of this standard, minorities specifically include nomadic communities, Roma, and other national or regional minorities.	*GIB*
Mitigation Hierarchy	The mitigation hierarchy provides an approach to prioritising actions. First, attempts should be made to anticipate and avoid negative impacts. If this is not possible, then negative impacts must be minimised. If neither of these is possible, then compensation and/or offsets must be provided for risks and impacts to the environment, workers and/or affected communities.	*IFC PS1 (2012: 1)*
Natural Habitat	Natural habitats are areas composed of viable assemblages of plant and/or animal species of largely native origin, and/or where human activity has not essentially modified an area's primary ecological functions and species composition.	*IFC PS6 (2012: 3)*
Modified Habitat	Modified habitats are areas that may contain a large proportion of plant and/or animal species of non-native origin, and/or where human activity has substantially modified an area's primary ecological functions and species composition. Modified habitats may include areas managed for agriculture, forest plantations, reclaimed coastal zones, and reclaimed wetlands.	*IFC PS6 (2012: 3)*
Non-replicable Cultural Heritage	Non-replicable cultural heritage may relate to the social, economic, cultural, environmental, and climatic conditions of past peoples, their evolving ecologies, adaptive strategies, and early forms of environmental management, where the (i) cultural heritage is unique or relatively unique for the period it represents, or (ii) cultural heritage is unique or relatively unique in linking several periods in the same site.	*IFC PS8 (2012: 3)*
Pollution	Hazardous and non-hazardous chemical pollutants in the solid, liquid, or gaseous phases, including other components such as pests, pathogens, thermal discharge to water, GHG emissions, nuisance odours, noise, vibration, radiation, electromagnetic energy, and the creation of potential visual impacts including light.	*IFC PS3 (2012: 1)*
Primary Supplier	Primary suppliers are those suppliers who, on an ongoing basis, provide the majority of living natural resources, goods, and materials essential for the core business processes of the project.	*IFC PS6 (2012: 7)*
Prime Habitat	The most ideal habitats for protecting wildlife biodiversity due to their size, location, diversity of habitat types, or presence of a particular type of habitat for plant or animal species.	*Envision® (2012: 173)*
Project	A defined set of activities, including those where specific physical elements, aspects, and facilities likely to generate risks and impacts, have yet to be identified. Where applicable, this could include aspects from the early developmental stages through the entire life cycle (design, construction, commissioning, operation, decommissioning, closure or, where applicable, post-closure) of a physical asset. In this context, a project is understood to	*IFC PS 1 (2012: 2)*

Keyword	Definition	*Reference*
	be an infrastructure project.	
Project Owner	The term 'project owner' is used throughout the Performance Standards broadly to refer to the party responsible for implementing and operating the project that is being financed, or the recipient of the financing, depending on the project structure and type of financing.	*IFC page (2012: i)*
Public Procurement	The procurement of goods and services on behalf of a public authority, such as a government agency.	*Wikipedia*
Public Space	A social space that is open and accessible to all, regardless of gender, race, ethnicity, age, or socioeconomic level, such as a common, town square, or public park.	*Envision® (2012: 173)*
Renewable Energy	Energy that comes from natural resources such as sunlight, wind, rain, tides, and geothermal heat, which are naturally replenished.	*Envision® (2012: 173)*
Replacement Cost	The market value of the assets plus transaction costs. In applying this method of valuation, depreciation of structures and assets should not be taken into account. Market value is defined as the value required to allow for lost assets to be replaced with assets of similar value.	*IFC PS 5 (2012: 1)*
Replicable Cultural Heritage	Tangible forms of cultural heritage that can themselves be moved to another location or that can be replaced by a similar structure or natural features to which the cultural values can be transferred by appropriate measures. Archaeological or historical sites may be considered replicable where the particular eras and cultural values they represent are well represented by other sites and/or structures.	*IFC PS8, (2012: 2)*
Requisite Variety	Concept based on Ashby's Law of Requisite Variety (Ashby, 1968) which states that "the larger the variety of actions available to a control system, the larger the variety of perturbations it is able to compensate".	*Web Dictionary of Cybernetics and Systems*
Resilience	Resilience describes the capacity of socio-ecological systems to function, so that the people living and working in them – particularly the poor and vulnerable – survive and thrive no matter what stresses or shocks they encounter.	*Inspired by ARUP's definition of resilience in cities*
Retrenchment	Retrenchment can cover a wide range of dismissals that do not essentially relate to the conduct or capability of the worker. These include: (i) the closure of a plant, factory, mine, or other workplace, with the total or near-total loss of jobs; (ii) job losses arising from a reduction in staffing requirements due to efficiency gains or falling demand for the company's products or service; (iii) job losses arising from a downsizing in operations or restructuring of the workforce following, for example, privatization.	*IFC Good Practice Note - Managing Retrench-trench-ment (2005: 1)*
Set-aside	Set-asides are land areas within the project site, or areas over which the project owner has management control, that are excluded from development and are targeted for the implementation of conservation enhancement measures. Set-asides will likely contain significant biodiversity values and/or provide ecosystem services of significance at the local, national and/or regional level. Set-asides should be defined using internationally recognised approaches or methodologies (e.g., High Conservation Value,	*IFC PS6 (2012: 3)*

Keyword	Definition	*Reference*
	systematic conservation planning).	
Solar Reflectance Index (SRI)	A measure of a material's ability to reject solar heat, as shown by a small temperature rise, which incorporates both solar reflectance and emittance in a single value. SRI is defined such that standard black (reflectance 0.05, emittance 0.90) is 0 and standard white (reflectance 0.80, emittance 0.90) is 100.	*Envision® (2012: 173)*
Stormwater	Water that originates during precipitation events. Stormwater that does not soak into the ground becomes surface runoff.	*Envision® (2012: 174)*
Subcontractor	An individual or business that signs a contract to perform part or all of a contractor's obligations.	*Inspired by wikipedia definition*
Supplier	An individual or business that provides goods or materials used by the infrastructure project.	
Surface Water	Water collecting on the ground or in a stream, river, lake, wetland or ocean, naturally replenished by precipitation and naturally lost through evaporation and sub-surface seepage into the ground.	*Envision® (2012: 174)*
Sustainability	A set of environmental, economic and social conditions in which all of society has the capacity and opportunity to maintain and improve its quality of life indefinitely without degrading the quantity, quality or the availability of natural resources and ecosystems.	*Envision® (2012: 174)*
Wetland	An area of land whose soil is saturated with water, either permanently or seasonally. Wetlands are typically categorised by characteristic vegetation and provide a unique ecosystem for flora and fauna, which may not be found in other ecosystems.	*Envision® (2012: 175)*

4.3 Acronyms

CIA	Cumulative impact assessment
EHS	Environmental, Health and Safety
ESIA	Environmental and Social Impact Assessment
ESMS	Environmental and Social Management System
FPIC	Free, prior and informed consent
GHG	Greenhouse gases
GIB	Global Infrastructure Basel Foundation
GIIP	Good International Industry Practice
ICP	Informed Consultation and Participation
ISEAL	International Social and Environmental Accreditation and Labelling
KPIs	Key Performance Indicators
ODS	Ozone Depleting Substance
PAD	Project Appraisal Document
PPP	Public-private partnership
SRI	Solar Reflectance Index

4.4 Bibliography

ARUP. 2014. *City Resilience Index: City Resilience Framework*. London: Ove Arup and Partners Limited.

Chartered Institute of Building. 2014. *Code of Practice for Project Management for Construction and Development*. London: John Wiley & Sons.

Equitable Origin. 2012. *EO100 Standard*. USA: Equitable Origin LLC.

European Investment Bank. 2013. Energy Lending Criteria: EIB and Energy: Delivering Growth, Security and Sustainability - EIB's Screening and Assessment Criteria for Energy Projects. Luxembourg.

FATF. 2013. National Money Laundering and Terrorist Financing Risk Assessment. Available - http://www.fatf-gafi.org/media/fatf/content/images/National_ML_TF_Risk_Assessment.pdf [2015, 4 December]

Global Infrastructure Basel. 2015. *GIB Grading Tool* [Online]. Available: http://www.gib-foundation.org/submit-your-own-project/geb-grading/grading-tool-for-sustainable-infrastructure/ [2015, 27 August].

Infrastructure Sustainability Council of Australia. 2013. *IS Rating Tool Scorecard*. [Online]. Available: http://www.isca.org.au/is-rating-scheme/downloads/is-rating-tool-scorecard. [2015, 24 August].

International Chamber of Commerce. 2011. *Rules for Combatting Corruption* [Online]. Available: http://www.iccwbo.org/Advocacy-Codes-and-Rules/Document-centre/2011/ICC-Rules-on-Combating-Corruption/ [2015, 27 August].

International Federation of Consulting Engineers (FIDIC). 2012. *Project Sustainability Logbook*. (Seoul Conference Draft Edition)

International Finance Corporation (IFC). 2005. *Managing Retrenchment*. Good Practice Note. Number 4. August 2005. 28 pages.

IFC. 2007. *International Health and Safety Guidelines*. Washington: World Bank Group.

IFC. 2012. *Performance Standards on Environmental and Social Sustainability*. Washington: World Bank Group.

IPCC. 2014. *Working Group III Report "Climate Change 2014: Mitigation of Climate Change*". Fifth Assessment Report.

Institute for Sustainable Infrastructure & Zofnass Program for Sustainable Infrastructure. 2012. *Envision® Version 2.0: A rating system for sustainable infrastructure*. Washington: ISI.

LEED. N.d. *Frequently Asked Questions - Focus: Building Materials*. Available: http://www.usgbc.org/Docs/LEEDdocs/LEEDfaq-materials2.pdf [2015, 4 December]

Transparency International. 2013. *Business Principles for Countering Bribery* [Online]. Available: http://www.transparency.org/whatwedo/tools/business_principles_for_countering_bribery , [2015, 27 August].

United States Environmental Protection Agency (EPA). What Is Green Infrastructure? [Online]. Available: http://www.epa.gov/green-infrastructure/what-green-infrastructure [2015, 7 December]

World Bank. N.d. *Template and Guidelines for the Project Appraisal Document (PAD).*

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