

PRIMER ON RESPONSIBLE INVESTMENT IN INFRASTRUCTURE



THE SIX PRINCIPLES

PREAMBLE TO THE PRINCIPLES

As institutional investors, we have a duty to act in the best long-term interests of our beneficiaries. In this fiduciary role, we believe that environmental, social, and governance (ESG) issues can affect the performance of investment portfolios (to varying degrees across companies, sectors, regions, asset classes and through time). We also recognise that applying these Principles may better align investors with broader objectives of society. Therefore, where consistent with our fiduciary responsibilities, we commit to the following:

- 1 We will incorporate ESG issues into investment analysis and decision-making processes.**
- 2 We will be active owners and incorporate ESG issues into our ownership policies and practices.**
- 3 We will seek appropriate disclosure on ESG issues by the entities in which we invest.**
- 4 We will promote acceptance and implementation of the Principles within the investment industry.**
- 5 We will work together to enhance our effectiveness in implementing the Principles.**
- 6 We will each report on our activities and progress towards implementing the Principles.**



PRI's MISSION

We believe that an economically efficient, sustainable global financial system is a necessity for long-term value creation. Such a system will reward long-term, responsible investment and benefit the environment and society as a whole.

The PRI will work to achieve this sustainable global financial system by encouraging adoption of the Principles and collaboration on their implementation; by fostering good governance, integrity and accountability; and by addressing obstacles to a sustainable financial system that lie within market practices, structures and regulation.

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INTRODUCTION

This paper clarifies key concepts of responsible investment in private infrastructure equity and debt, and how the six Principles for Responsible Investment apply to infrastructure. It focuses primarily on Principles One and Two.

WHAT IS RESPONSIBLE INVESTMENT IN INFRASTRUCTURE?

The Principles for Responsible Investment (PRI) defines responsible investment as “an approach to investing that aims to incorporate environmental, social and governance (ESG) factors into investment decisions, to better manage risk and generate sustainable, long-term returns”¹. Responsible investment is particularly compatible with infrastructure investing because of the long-term nature of this asset class and its focus on essential services.

Responsible investment is about **systematically identifying, assessing, pricing, managing and monitoring material ESG risks. It means preserving and enhancing the value of an asset in the investment process – from origination to deal making, asset management and exit.** Addressing material ESG considerations and practising active asset management should contribute to an improvement in the long-term risk-adjusted returns for investors.

INDIRECT INVESTMENTS	DIRECT INVESTMENT
82% of the PRI's <i>indirect</i> infrastructure investor signatories that manage US\$150 billion in infrastructure assets consider ESG to some extent in their manager selection, appointment and monitoring	87% of the PRI's <i>direct</i> infrastructure investor signatories that manage US\$505 billion in infrastructure assets consider ESG to some extent in their investment decisions

...AND WHY PRACTISE IT?

MANAGING MATERIAL RISKS

Infrastructure investors should take into account a broad range of material ESG issues that these investments might face over the assets' lifetime. These considerations could include economic developments, demographic shifts, climate change impacts, relationships with local communities (incorporating users of infrastructure and other stakeholders, and legislative and policy changes. Negative externalities, such as environmental degradation and health and safety incidents, can also outweigh the positive impacts of the investment. ESG concerns may also affect timelines, licence to operate and commercial viability.

Examples include climate group warnings about the Adani Central Queensland railway project and the dispute surrounding the Dakota Access Pipeline (see p.6).

Materiality will vary according to factors including size and type of asset, region, operational environment and stage of project cycle. The impact of an asset on the natural environment and local community tends to be significant during the development and construction of greenfield projects. Stakeholder management from an early stage can be key to obtaining and maintaining the legal and social licence to operate (p.6 includes the example of Sapphire Wind Farm's community engagement programme). The resilience of the asset to future ESG risks can also be influenced during the development phase. By taking into consideration preparedness to environmental and social risks and updates to construction standards, design and contractor requirements can facilitate future risk management. This is highlighted in the example on the value of resilience to extreme weather on p.6.

ESG CONSIDERATIONS IN INFRASTRUCTURE INVESTING

- maintaining social licence to operate
- health and safety standards (pre- and post-commercial operation date)
- biodiversity impacts
- alignment of interest with shareholders
- stakeholder management and community relations
- labour standards
- land rights, indigenous rights
- accessibility and social inclusion
- service reliability
- climate change impact and additionality
- resource scarcity and degradation
- extreme weather events
- supply chain sustainability
- accountability
- board independence and conflicts of interest
- management and board oversight of ESG
- bribery and corruption
- tax policy
- cyber security
- diversity and anti-discrimination

¹ Source: www.unpri.org

Brownfield infrastructure ESG risks relate both to the ongoing operation, reconstruction, renovation or expansion of an existing asset, and to long-term trends which may materialise slowly and for which the business needs to prepare. Extreme weather, environmental trends, gradual resource degradation, poor governance, deteriorating community relations and potential loss of the social licence to operate are all examples of ESG risks to an operational asset. These risks require management strategies to safeguard both assets and returns to investors.

DELIVERING VALUE

Along with risk management, ESG can also help investors identify and take advantage of opportunities for value preservation and creation through the influence they exert. ESG can help to identify resource efficiencies, reduce the company's environmental footprint, drive innovation, improve community relations, protect the social licence to operate and support staff retention. The case study on storm water treatment in the Port of Brisbane (p.6) shows how anticipating environmental risk can benefit both company and environment.

POSITIVE IMPACT – CONTRIBUTING TO A MORE SUSTAINABLE WORLD

Infrastructure is widely considered to have a positive social impact. Infrastructure forms the backbone of every economy, enabling economic and social development. Increased infrastructure spending is widely considered to generate an economic multiplier effect. Any infrastructure asset, whether under construction or fully operational, generates social, environmental and economic impacts, such as contributing to greenhouse gas emissions reduction, revitalising disenfranchised areas, improving access to services and creating employment. Infrastructure underpins many of the 17 UN Sustainable Development Goals (SDGs),² and thus infrastructure investors are well positioned to make a positive impact on the societies and economies in which they invest.

The PRI's *The SDG Investment Case*³ describes the SDGs as a model for economic growth that does not compromise our environment or place unfair burdens on societies. The SDGs encourage both governments and private investors to invest more into infrastructure and hence present a significant opportunity for investors. The annual investment required to meet the SDGs is estimated at US\$5trn-US\$7trn from 2015 to 2030.⁴

To meet this challenge, responsible infrastructure investment will need to consider not only how ESG risks and opportunities influence the risk-return profile of an investment portfolio but also how a responsible investment portfolio affects broader societal objectives. The SDGs can help by drawing attention to the risks associated with unsustainable practices and by providing a common framework for referencing contributions to a more sustainable world.

IN SUMMARY

This approach integrates ESG factors into value preservation and creation, not only for investors but all stakeholders. This is not a matter of merely complying with the rules and regulations governing an infrastructure business. Infrastructure provides essential services and hence benefits society. However, the active management of ESG considerations is essential to achieve this sustainably and to minimise negative externalities.

2 For more information: www.sustainabledevelopment.un.org/sdgs

3 PRI (2017), The SDG Investment Case, available at www.unpri.org/about/sustainable-development-goals

4 UNCTAD (2015), Investing in Sustainable Development Goals: Action Plan for Private Investments in SDGs

RESPONSIBLE INVESTMENT STRATEGIES INCLUDE:

- Screening (negative/positive): e.g. sector exclusions, best-in-class investing
- Thematic investing: e.g. renewables, green bonds, social infrastructure
- Integrating ESG: e.g. factoring flooding/drought models into valuation methodologies
- Engagement: investor stewardship through direct (shareholder) engagement and through director appointments to the board

EXAMPLE: COMMUNITY ENGAGEMENT AT SAPPHIRE WIND FARM

Based in New South Wales, Australia, Sapphire Wind Farm had a planned production capacity of 270 megawatts. As the project took shape, the board formalised a Community Engagement Approach to secure a social licence to operate. The initiative's expressed objective is to "extend opportunities for the local community to be meaningfully involved in and empowered by our renewable energy projects, and to leave a lasting legacy within the community."

The project team initiated this strategy to ensure public support and full transparency over the expected 18 month construction period. Due to neglected or mismanaged community engagement at other infrastructure projects across the world, permits have been denied, construction delayed and reputations damaged by negative press coverage harming future business.

The engagement programme consists of four pillars: partnering with contractors on a range of innovative legacy projects during construction; identifying and delivering such projects; assessing local community interest in directly investing in the wind farm; and establishing a benefit fund to support longer-term community initiatives. So far, Sapphire Wind Farm has engaged directly with over 10,000 members of the community.

Source: Partners Group & CWP Renewables

EXAMPLE: COMMUNITY IMPACT AND RISK IN CONSTRUCTION

The Dakota Access Pipeline sparked significant controversy when the Standing Rock Sioux tribe filed a lawsuit claiming that it threatened the tribe's water supplies and cultural sites. As a result of the US President's executive order, the pipeline opened to commercial service on 1 June 2017. However, a June ruling by a US District Judge stated that the constructor had failed to adequately consider the pipeline's impacts on and risks to the Standing Rock tribe. The ruling and legal dispute have resulted in uncertainty about the costs, delays and continuity of the pipeline's operations via its current route.

EXAMPLE: FAR-SIGHTED INVESTMENT IN STORMWATER TREATMENT AT PORT OF BRISBANE

The Port of Brisbane made a \$1m investment in an Offsite Stormwater Treatment Project. The environmental health of the Brisbane River at the port, and the surrounding Moreton Bay, is under threat from high levels of sediment. A major source of this sediment is erosion in creeks and rivers 100 kilometres (km) upstream from the port.

The first stage of the project involved restoring nearly 1 km of badly eroded creek bank which was adjacent to horticultural land. This was achieved through, for instance, bank stabilisation, installation of grade-controlled structures, and replanting 4,000 native trees and grasses. The project has delivered excellent environmental outcomes. In the first year alone, the project prevented 4,800 tonnes of sediment (equivalent to 250 truckloads of dirt) from entering the creek and the Brisbane River. Over time, as the vegetation matures, the bank will become more resilient.

The project benefits both the environment and the port's operations because these activities are likely to reduce the port's maintenance dredging requirements.

Source: QIC

EXAMPLE: COMMERCIAL VIABILITY AND CLIMATE RISK

Environmental groups have warned that the Adani Central Queensland railway project in Australia will not be commercially viable due to climate change. This railway is planned as a link between the company's proposed thermal coal mine and the Abbot Point Coal terminal. The groups claim that a federal loan to the project is a substantial risk to taxpayers if it receives public financing.

EXAMPLE: SONNEDIX AND THE VALUE OF INVESTING IN RESILIENCE

Sonnedix, a solar power company owned by institutional investors advised by JP Morgan Asset Management, decided to build a new solar power plant at Salinas in Puerto Rico to a standard well above the commonly used 100 year storm standard. While requiring more initial capital expenditure, the plant has proved more resilient than other local plants to extreme weather. The 2017 hurricanes that hit Puerto Rico damaged less than 0.5% of the Salinas plant's 175,000 solar panels. This meant it could continue to power the area (subject to grid availability or microgrid creation) in the aftermath of the hurricane.

Source: JP Morgan Asset Management

APPLYING THE SIX PRINCIPLES TO INFRASTRUCTURE

There is no one-size-fits-all approach to responsible investment. A responsible investment strategy should not be considered an add-on but rather embedded into the policies, strategies and practices of institutional investors. The diversity of infrastructure businesses, sectors, financing models and regulatory frameworks requires infrastructure investors to adjust their practices to ensure that responsible investment is considered adequately but efficiently. Some ESG considerations will apply to all assets but investors must identify and deal with the most material concerns on a case-by-case basis.

82% of PRI's direct infrastructure investor signatories have a dedicated responsible investment policy for infrastructure

Below we outline some of the ways indirect and direct infrastructure investors can apply the six Principles for Responsible Investment. The points under each one of the Principles are not intended to be exhaustive, and some will not be relevant for every investment. Readers should consider which actions are best suited to their investment objectives and organisational goals. Further resources and guidance on implementing responsible investment are listed in the appendix.

PRINCIPLE 1: WE WILL INCORPORATE ESG ISSUES INTO INVESTMENT ANALYSIS AND DECISION-MAKING PROCESSES

Incorporating ESG refers to both the approach of the investor organisation as a whole, including resourcing, strategy and governance, and to how the organisation's approach to ESG incorporation is implemented in the investment process. Some of the ways investors can implement Principle 1 are described below.

RESPONSIBLE INVESTMENT IN ORGANISATIONAL GOVERNANCE, POLICY AND STRATEGY

- **Organisational governance.** Train and educate staff to consider and integrate ESG into decision-making throughout the investment process (including due diligence, post-investment monitoring, value creation activities, and risk and compliance monitoring).
- **Policy and strategy.** Formalise your ESG approach into a policy. Many investors will have an organisation-wide ESG policy that covers all asset classes. Adapting this into a specific policy for infrastructure will help align expectations and practices on responsible investment in infrastructure. A policy covering all asset classes is likely to leave space for interpretation on its application

to infrastructure. Integrate the responsible investment policy into a practical implementation strategy so that investment professionals are equipped with practical methods for living up to the firm's policy.

- **Portfolio construction.** Incorporate ESG matters into asset allocation and portfolio diversification (e.g. asset concentration issues with respect to climate change risk, leverage).

EXAMPLE: AMP CAPITAL'S INFRASTRUCTURE ESG TOOLBOX

The Infrastructure ESG Toolbox was designed to address the need for specialist knowledge relating to multi-faceted ESG factors across a diverse range of sub-sectors and regions of the global investment landscape. The Toolbox comprises a collection of internationally recognised best practice guidelines and sector-specific resources, designed to assist the infrastructure investment team in dealing with ESG issues of varying materiality. The Toolbox's resources supplement existing investment policies and are utilised throughout investment decision-making and ongoing asset management activities.

Source: AMP Capital [Infrastructure ESG Policy Guidelines](#)

INTEGRATING ESG IN INDIRECT INFRASTRUCTURE INVESTMENT (FUNDS)

- **Investor selection of fund managers.** Incorporate ESG in due diligence when selecting infrastructure fund managers, including requiring managers to disclose how they will incorporate ESG factors into their investment decision-making, monitoring and reporting processes. Request examples from previous funds – or in the case of new managers, from individuals' previous roles. Refer to existing PRI guidance in the appendix.
- **Assess or rate managers on their approach to integrating ESG analysis,** where appropriate, into risk frameworks and the investment decision-making process. This can help investors evaluate overall alignment with their responsible investment policy and encourage fund managers to improve their ESG integration.
- **Fund manager appointments.** Request the incorporation of ESG provisions in fund terms, including Limited Partnership Agreements and side letters. Refer to existing PRI guidance in the appendix.
- **Fund manager monitoring.** Use ESG topics covered during selection, as well as the provisions included or discussed when agreeing fund terms, as a foundation for monitoring ESG considerations. Request periodic reports on engagement activities and ESG performance. Set clear expectations for when and how the fund manager should report material, adverse ESG incidents. Provide examples to illustrate what you consider severe and what constitutes a material ESG incident.

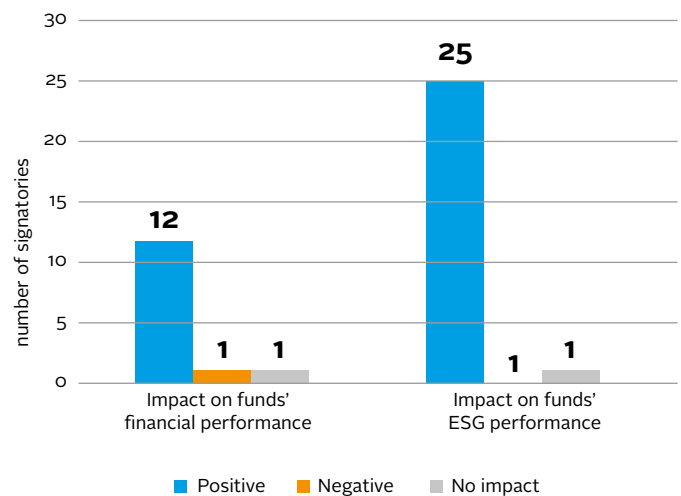
EXAMPLE: SWEN CAPITAL PARTNERS' ESG CONTROVERSY MONITORING

SWEN Capital Partners is an asset manager specialising in responsible investments for private markets. The organisation has established an in-house monitoring system for ESG controversies concerning its direct investments as well as for the largest underlying portfolio companies in the funds in which it invests indirectly. The checks are carried out internally by SWEN Capital Partners' ESG team via daily press reviews and monitoring tools (Thompson Reuters Worldcheck, Google Alerts, support from holding company OFI's ESG team etc). This allows SWEN Capital Partners to classify ESG incidents into three levels:

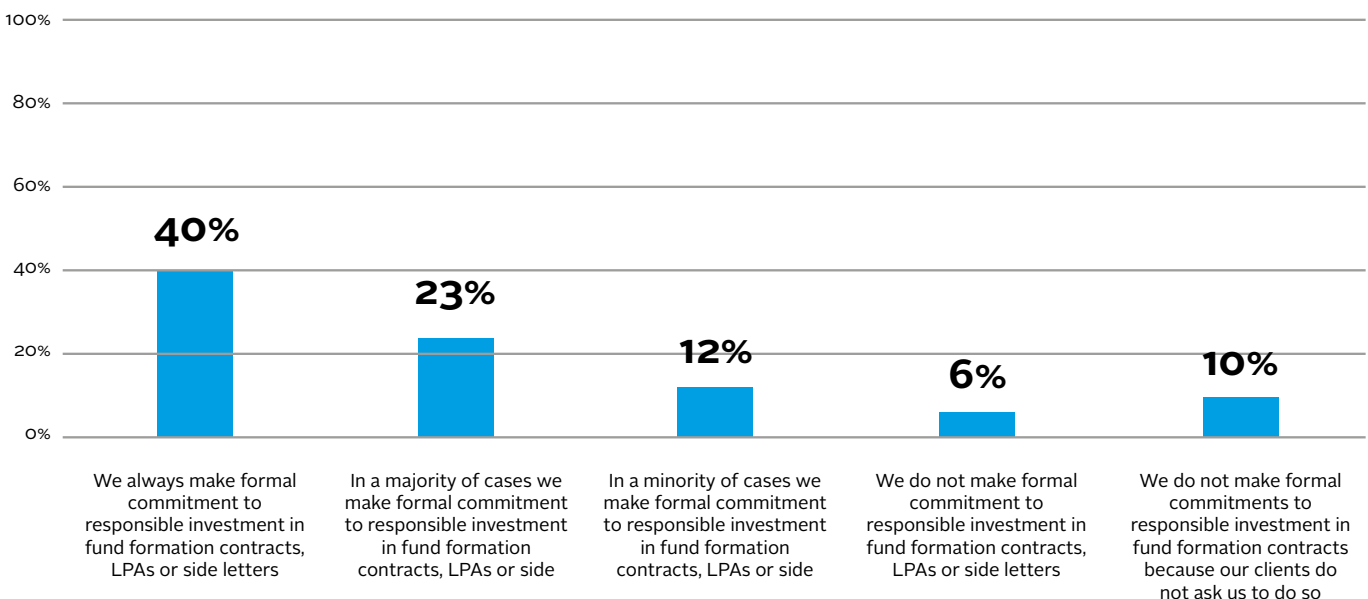
- **serious controversy** (controversy that is likely to call into question the licence to operate);
- **significant controversy** (controversy that has a significant financial and/or reputational impact on the company);
- **light controversy** (controversy with limited financial and/or reputational impact for the company). The in-house controversy tracking system also allows SWEN Capital Partners to access positive information about companies' consideration of ESG.

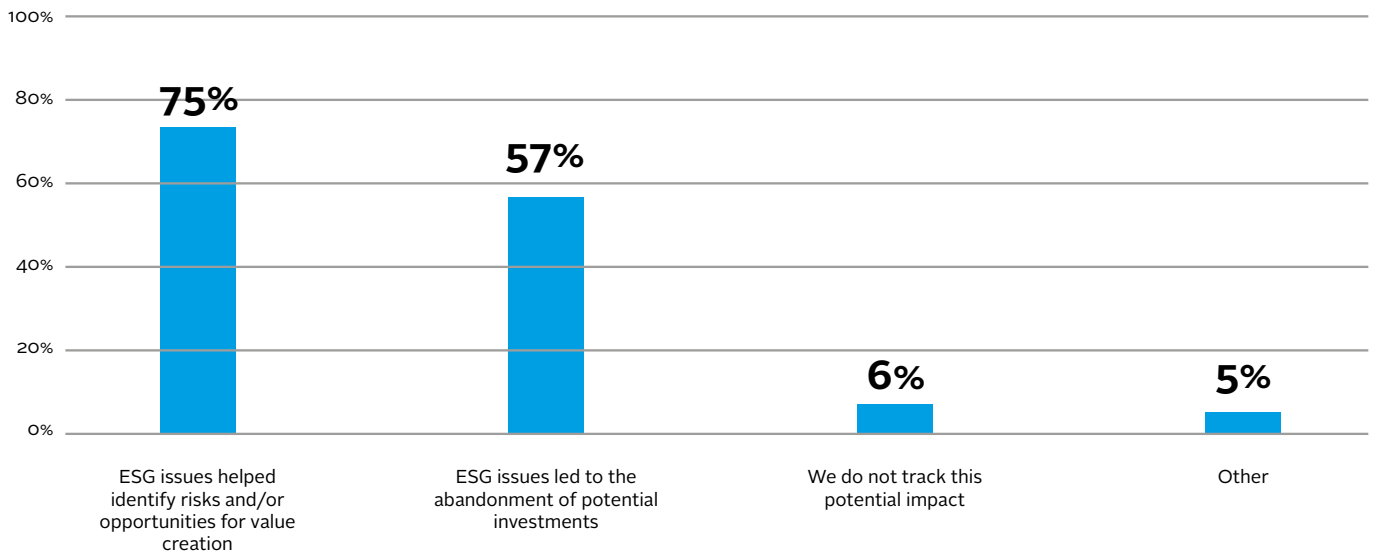
LINKING ESG INTEGRATION TO OUTCOMES

A small number of PRI signatories reported in 2017 on the voluntary indicators relating to ESG and financial performance in the Direct Infrastructure module of the PRI Reporting Framework. The graph below shows the perceived links between ESG integration and investment outcomes both in terms of financial performance and the ESG performance of the fund or portfolio as a whole.



Investment managers' report on formal commitments to responsible investment



ESG issue impact on selection of direct investments (total of 65 investors reported)**INTEGRATING ESG IN INFRASTRUCTURE INVESTMENT (DIRECT)**

- **ESG requirements in the investment policy and process.** Set requirements for completing environmental and/or social impact assessments and fulfilling ESG criteria in different phases of the investment process (primarily due diligence and ownership) using third-party expertise if necessary.
 - **Origination.** Consider potential current and future exposure to ESG risks and opportunities in your investment universe when sourcing investment opportunities. This can include technology; site; engineering, procurement, and construction (EPC) contractors and suppliers; region; sector; regulatory and policy environment; and impact targets of relevant stakeholders. It can include your ability to deal with these risks and seize these opportunities across the field of potential investments.
 - **Screening.** Include ESG risks in exclusion checklists and as mandatory parts of screening reports and pre-investment approvals. Screening should identify any potential ESG deal breakers and can also be used to detect ESG factors to be explored in detailed due diligence. Possible considerations include reputational concerns such as human rights abuses and harmful environmental practices.
- 57%** of direct infrastructure investor reporters stated that ESG issues led to the abandonment of potential investments
- **Due diligence.** Given that ESG considerations can have both a positive and negative impact on returns, treat ESG matters like other aspects of due diligence by assessing risks, the ESG track record of the business or asset, and opportunities. Consider ESG factors throughout the full life cycle of the business (development, construction, operation, maintenance, decommissioning), including an assessment of impacts and risks in the supply chain, such as manufacturing and transport.
 - **Preparing for post-acquisition activities.** On the basis of due diligence findings, create management and remediation strategies for material ESG risks, including mitigation, pricing, transfer and monitoring. Include any ESG opportunities for increased returns in a post-acquisition value preservation and creation plan. The consideration of both material ESG risks and opportunities for value preservation and creation in post-acquisition plans can be made a condition of Investment Committee approval. Where risk mitigation is not possible, consider declining the investment opportunity.

IDENTIFYING ESG RISKS AND OPPORTUNITIES IN DUE DILIGENCE

- Assessing potential environmental and social impacts of investee companies and assets may not only influence the investment decision but also prepares for risk management during the holding period.
- Due diligence should cover the business track record on the management of ESG risk, such as:
 - existence of policies and systems relating to sustainability and ESG issues, the coverage of these policies and their governance;
 - track record on health and safety performance;
 - responsibility for sustainability and ESG within the business;
 - track record on ESG performance improvements in line with sustainability policies and procedures;
 - track record on monitoring and reporting to the board, shareholders and other stakeholders on ESG policy implementation and on progress on performance targets.
- For newly created businesses and companies, due diligence should include the track record of past and current management activities.
- Assessing risks and existing practices can also highlight opportunities for protecting value and improving the revenue and risk profile of the investment. These include, for example, energy efficiency, high-performance buildings, waste reduction, stakeholder engagement and potential for obtaining environmental certificates.

- **ESG in valuations and transactions** (including exits). Attribute value to ESG factors throughout the life cycle of the investment, including potential ESG incidents, issues and impacts, to encourage the consideration of ESG costs and associated benefits.

OTHER CONSIDERATIONS

- **Minority shareholders and debt investors.** When investing as a minority shareholder or lender, undertake ESG due diligence on the lead sponsor, its dialogue with the management of the infrastructure business and its existing ESG approach. Assess whether the majority shareholder is aligned with your views on responsible investment and whether it is willing to listen to minority shareholders or debt investors.
- **Fundraising.** Incorporate ESG into your offering documents, specifying the role of ESG factors in your investment strategy and describing how you have integrated ESG throughout the investment process, including pre-investment activities, post-investment activities, and reporting to investors. Make your ESG policy available to existing and prospective investors.

88% of PRI's infrastructure investment manager signatories mention ESG in their fund placement documents

PRINCIPLE 2: WE WILL BE ACTIVE OWNERS AND INCORPORATE ESG ISSUES INTO OUR OWNERSHIP POLICIES AND PRACTICES

Active ownership in the context of infrastructure refers to investor stewardship for both equity and debt investors. This is channelled through direct shareholder or lender engagement and board director appointments during the investment period. Some of the ways investors can implement Principle 2 are described below.

- **Engagement strategy.** Build, disclose and implement an organisation or fund-level engagement strategy on ESG issues. Use ESG assessments undertaken during due diligence to prioritise attention to ESG considerations and potential for improving profitability, efficiency and risk management.
- **Post-acquisition plan.** Include material ESG risks and opportunities identified during due diligence into the post-acquisition plan of each asset/project company and integrate this into asset management activities. This should include the management and remediation strategies for material risks.
- **Using available avenues for influence.** Engage with and encourage the management of the business to act on the identified ESG risks and opportunities using the mechanisms available. These may include board seats, voting rights, shareholder resolutions and dialogue with the lead sponsor and other investors.
- **Communicating expectations.** Define and communicate your expectations of ESG operations and maintenance performance to the infrastructure business managers. Refer to international standards and guidelines where relevant, such as the International Finance Corporation (IFC) Performance Standards and the Equator Principles.
- **Asset-level policies.** Ensure ESG factors identified as material during due diligence are explicitly woven into asset-level policies. This may involve updating policies or working with the company to develop new policies.
- **Responsibility for sustainability and ESG management.** Advocate a governance framework that clearly articulates who has responsibility for ESG and sustainability, the company board's accountability and oversight of ESG considerations.
- **Performance targets and incentives.** Set performance targets for preserving or improving environmental and social impact, including regular reports to the board and

investors. Explore whether ESG performance against Key Performance Indicators (KPIs) can be linked to company management financial incentives.

- **Building asset or project company capacity on ESG.** Where possible, make ESG information and expertise available to the asset or project company to help it develop capacity and management skills in this area.

ENGAGEMENT AS AN INFRASTRUCTURE DEBT INVESTOR

Due to the illiquid nature of many private infrastructure debt investments and the often long-dated tenors, debt investors must also account for long-term risks, including ESG matters. Prior to the investment decision, investors can engage with the issuer and communicate their expectations on ESG risk management. They can also include provisions within covenants to encourage transparency and disclosure, and ensure access to the issuer in case ESG concerns begin to escalate.

EXAMPLE: PURSUING SUSTAINABLE WASTE MANAGEMENT AS AN INFRASTRUCTURE DEBT INVESTOR

Funds managed by M&G provided debt to a company to build a facility that incinerates waste material and produces electricity to power homes in the UK. M&G decided to engage with the borrower to verify that the residue after incineration, known as bottom ash, was being processed sustainably by the new third-party recycling facility, and that its usage presented no danger to the environment and public health. M&G felt the issue needed to be addressed with the borrower in order to guard against any negative implications for its investors and the business resulting from improper treatment of the bottom ash. M&G considers it important to minimise any potentially adverse social and environmental consequences of the infrastructure projects it finances, which further strengthened its motivation for engagement in this case. At M&G's request, the plant operator has visited the site to inspect the recycling of the bottom ash and has reported back to its technical advisor with the necessary reassurance.

PRINCIPLE 3: WE WILL SEEK APPROPRIATE DISCLOSURE ON ESG ISSUES BY THE ENTITIES IN WHICH WE INVEST

ESG disclosure refers to investor monitoring and asset or company ESG reporting to investors, stakeholders and the general public. Some of the ways investors can implement Principle 3 are outlined below.

- **Consistency throughout the investment process.** Include ESG disclosure as a topic of engagement with portfolio companies and lead sponsors throughout the investment process: during due diligence, at the onset of the post-investment phase and as part of asset management and monitoring.

EXAMPLE: INFRARED'S ESG QUESTIONNAIRE

InfraRed, an international infrastructure and real estate investment manager, runs a standardised annual ESG questionnaire across its portfolio of assets. The questionnaire is composed of 26 questions divided into five sections:

- governance – management
- governance – policies
- social activity
- environmental performance
- directors' activities

- **KPIs.** Identify ESG KPIs to monitor for each investment in dialogue with the management of the asset/project company, based on the material risks and opportunities identified in due diligence. Develop separate KPIs for greenfield and brownfield investments to reflect the differing risk profiles. Request regular reports on these KPIs for both shareholders and lenders. For example, they can be integrated within quarterly construction/operation reports and annual financial reports.
- **Board and risk committee involvement.** Feature ESG performance monitoring as a regular agenda item at board meetings and discuss any material risks at risk committee meetings.
- **ESG incidents.** Set clear expectations for when and how the asset or project company should report material, adverse ESG incidents, as well as how these should be remediated. Provide examples to illustrate what you consider severe and what constitutes a material ESG incident.
- **Climate-related financial disclosures.** Where appropriate, encourage asset/project companies to disclose climate-related financial information in line with the [Task Force on Climate-related Financial Disclosures \(TCFD\)](#) recommendations.

EXAMPLE: GRESB INFRASTRUCTURE

The [GRESB Infrastructure Assessment](#) provides a platform for reporting and peer benchmarking of ESG management and performance of both funds and infrastructure assets across a variety of sectors. The asset assessment provides a standardised framework for investors to request structured ESG reporting from assets or companies on an annual basis.

PRINCIPLE 4 : WE WILL PROMOTE ACCEPTANCE AND IMPLEMENTATION OF THE PRINCIPLES WITHIN THE INVESTMENT INDUSTRY

Investors can act to promote acceptance of the Principles. They can encourage peers, clients, fund managers, service providers and other industry influencers to implement the Principles. Some of the ways investors can implement Principle 4 include are outlined below.

- **Indirect investors.** Include requirements to PRI in requests for proposals (RFPs). Ask for access to fund manager PRI assessment reports as part of due diligence, and encourage fund managers to improve responsible investment practices during the investment period. Set and communicate ESG expectations to asset consultants, placement agents and other investment service providers.
- **Direct investors.** Engage co-investors and sponsors on the rationale for responsible investment and the development of good practices. Communicate responsible investment expectations to portfolio companies and special purpose vehicle (SPV) managers. Communicate ESG expectations to investment service providers.
- **Policy and regulatory developments.** Support regulatory or policy developments aligned with the Principles. Public authorities such as the US Department of Labor, the UK Law Commission and the Japanese Financial Conduct Authority have adopted regulation or guidance promoting the inclusion of material ESG factors into a fiduciary's analysis. At the time of writing, the European Commission High Level Expert Group on Sustainable Finance is examining the integration of sustainability into EU legislation.

PRINCIPLE 5: WE WILL WORK TOGETHER TO ENHANCE OUR EFFECTIVENESS IN IMPLEMENTING THE PRINCIPLES

Principle 5 means collaborating with other PRI signatories and stakeholders on common goals, both through the PRI and other industry initiatives. Some of the ways investors can implement Principle 5 are outlined below.

- **Industry initiatives.** Support and participate in industry initiatives on sharing knowledge and tools, pooling resources, reporting and harmonising responsible investment practice. Examples include the PRI, GRESB Infrastructure and the Long-Term Infrastructure Investors Association. Encourage infrastructure investor, asset management, pension fund and private equity associations to expand their reach to responsible investment practices in infrastructure.

- **Collective action.** Join forces to address relevant emerging ESG issues.
- **Rating tools.** Make use of asset sustainability rating tools such as IS Rating and Envision Standards.
- **Co-investors and lenders.** Share your ESG integration activities with other investors in your assets.

PRINCIPLE 6: WE WILL EACH REPORT ON OUR ACTIVITIES AND PROGRESS TOWARDS IMPLEMENTING THE PRINCIPLES

Principle 6 refers to investor transparency. Some of the ways investors can implement Principle 6 are outlined below.

- **PRI reporting.** Complete annual PRI reporting requirements, including the PRI infrastructure module, irrespective of the size of your infrastructure portfolio relative to your assets under management.
- **Investor reporting.** Include ESG KPIs, activities and impacts in investor reporting on an annual or semi-annual basis. Report accurately on positive impacts where these are an explicit feature of fund objectives.
- **TCFD recommendations.** Disclose climate-related financial information in line with the TCFD recommendations, including:
 - governance: the organisation's governance of climate-related risks and opportunities;
 - strategy: actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning;
 - risk management: processes used by the organisation to identify, assess and manage climate-related risks; and
 - metrics and targets: the metrics and targets used to assess and manage relevant climate-related risks and opportunities.
- **Beneficiaries and other stakeholders.** Discuss ESG issues and the Principles with beneficiaries. Make use of reporting to raise awareness among a broader group of stakeholders.
- **Service providers.** Disclose what is required from service providers in relation to the Principles.
- **ESG controversies.** Discuss penalties, fines and controversies with investors and promote transparency throughout the investment chain from direct investors up to beneficiaries.

KEY CHALLENGES FOR INFRASTRUCTURE INVESTORS

Responsible investment in infrastructure is still maturing. Many questions remain open and have no commonly accepted answers. Some of the questions the industry will have to answer are listed below.

RATIONALE FOR RESPONSIBLE INVESTMENT IN INFRASTRUCTURE

- How can infrastructure investors demonstrate that responsible investing preserves and adds value to their clients and stakeholders?

IMPLEMENTING RESPONSIBLE INVESTMENT

- How can infrastructure investors determine the most material ESG issues across regions, sectors, investment horizons and other variables?
- How can infrastructure investors apply a unique corporate ESG policy to the particularities of a given investment?
- How can infrastructure investors integrate ESG into their investment decisions in a meaningful way and avoid greenwashing?
- What are the best metrics to accurately measure ESG benefits across investments?
- How can infrastructure investors ensure responsible investment principles are upheld across the multiple layers of infrastructure project execution (operators, contractors, subcontractors, etc)?

CLOSING KNOWLEDGE GAPS

- What does best practice in responsible investment in infrastructure look like?
- What are the major knowledge gaps in ESG issues, investment practices, connections between ESG and performance?
- What are the major gaps in terms of industry tools and resources for investors?
- How can infrastructure investors best align with the World Bank Equator Principles⁵ positive impact financing guidelines adopted by most lending institutions?

SUSTAINABLE DEVELOPMENT

- What are the major barriers to private investment in emerging market (green) infrastructure and can they be overcome?
- How can infrastructure investors best contribute to the United Nations' SDGs?⁶

⁵ <http://equator-principles.com/>

⁶ <http://www.un.org/sustainabledevelopment/sustainable-development-goals/>

LOOKING AHEAD

Infrastructure assets are often heavily regulated, operate with a government counterparty or are subject to public scrutiny. This means that considering some ESG factors is an inherent part of the business for many direct infrastructure investors. However, responsible investment practice takes place on an ad hoc and case-by-case basis rather than through a strategic assessment of the ESG risks and value creation opportunities across a portfolio. A clear description of responsible investment best practice has still not emerged, nor have the appropriate tools and frameworks been fully defined. Progress on responsible investment in infrastructure means moving from ad hoc to systematic practice. It means going beyond compliance to considering responsible investment as a value driver. It is about not just managing a specific risk but taking into account the overall societal and environmental impact of the investment.

The PRI can support investors dealing with these considerations. The PRI was founded in 2006 and started its work on infrastructure in February 2017. The PRI's objectives are to:

- develop an industry-wide understanding of responsible investment in infrastructure; and
- promote an industry-wide expectation throughout the infrastructure investment chain to embed responsible investment into standard investment practice.

The work stream scope includes investment into private infrastructure equity and debt, both greenfield and brownfield. Please refer to the appendix for details on the PRI Infrastructure Advisory Committee.

CONTACT AND GETTING INVOLVED

To find out more and to get involved in the PRI's infrastructure work stream, please contact:

infrastructure@unpri.org

APPENDIX

PRI RESOURCES

INFRASTRUCTURE

- [Responsible investment in infrastructure](#) case study compendium (2012)

PRIVATE EQUITY

Selection, appointment and monitoring of fund managers

- [LP responsible investment due diligence questionnaire](#) (also available in [Word](#) and [Excel](#) format, and in [French](#)) and [How to use it](#) (2015)
- [Incorporating responsible investment provisions into private equity fund terms](#) (2017)

Other guidance

- [Integrating ESG in private equity: A guide for general partners](#) (also available in [French](#)) and [short summary](#) (2014)
- [Responsible investment in private equity: A guide for limited partners, 2nd edition](#) (2011)
- [How-to video on CDC ESG Toolkit for Fund Managers](#) (2016)
- [The integration of ESG issues in M&A transactions: Trade buyer survey results](#) (2013)

PROPERTY

- [Sustainable real estate investment, Implementing the Paris Climate Agreement: An Action Framework](#) (2016)

RESPONSIBLE INVESTMENT IN ORGANISATIONAL GOVERNANCE

- [Investment Policy: Process & Practice – A Guide for Asset Owners](#) (2016)
- [Crafting an Investment Strategy – A Process Guidance for Asset Owners](#) (2016)

ACTIVE OWNERSHIP AND STEWARDSHIP

- [A Practical Guide to Active Ownership in Listed Equity](#) (2018 forthcoming)
- [ESG Engagement for Fixed Income Investors - Managing Risks, Enhancing Returns](#) (2018 forthcoming)

SUSTAINABLE DEVELOPMENT GOALS

- [The SDG investment case](#) (2017)

POLICY AND REGULATION

- [Global guide to responsible investment regulation](#) (2016)
- [Fiduciary Duty in the 21st Century](#) (2015)

OTHER RESOURCES

- AIIB (2016) [Environmental and social framework](#), Asian Infrastructure Investment Bank, Beijing
- Barclays (2017) [The water challenge: preserving a global resource](#), Barclays, London
- GIIN and Cambridge Associates (2017), [The Financial Performance of Real Assets Impact Investments - Introducing the Timber, Real Estate, and Infrastructure Impact Benchmarks](#), Global Impact Investing Network and Cambridge Associates, New York
- CDC (2015) [CDC ESG Toolkit for Fund Managers](#), CDC Group, London
- ERM (2015) [Effective management of ESG risks in major infrastructure projects](#), Environmental Resources Management, London
- GIB (2015) [Green Investment Handbook](#), Green Investment Bank, London
- GIB – [Global Infrastructure Basel](#), Basel. Founders of the [SuRe Standard for Sustainable and Resilient Infrastructure](#) and [SmartScan](#)
- GIA – [Global Infrastructure Investor Association](#), London
- GRESB (2017) [GRESB Infrastructure asset assessment](#), GRESB, Amsterdam
- GRESB (2017) [GRESB Infrastructure fund assessment](#), GRESB, Amsterdam
- [Equator Principles](#), Equator Principles Association, Washington DC
- IFC, [IFC Performance Standards](#), International Finance Corporation, Washington DC
- ISCA – The [Infrastructure Sustainability Council of Australia](#), Sydney. Founder of the [IS rating system](#), maintains the [ISCA resources library](#)
- ISCA (2016) [Developing a Business Case for Sustainability Initiatives in Infrastructure](#), Infrastructure Sustainability Council of Australia, Sydney
- ISCA (2011) [Guidelines for Climate Change Adaptation](#), Infrastructure Sustainability Council of Australia, Sydney
- ISCA, GRESB and WSP (2016) [Integrated Frameworks for Infrastructure Sustainability](#), Infrastructure Sustainability Council of Australia, Sydney
- ISI – [Institute for Sustainable Infrastructure](#), Washington DC. Founder of the [Envision ratings system](#)
- LTIIA – [Long Term Infrastructure Investors Association](#), Paris
- McKinsey and BNEF (2016) [An Integrated Perspective on the Future of Mobility](#), McKinsey and Bloomberg New Energy Finance
- Mercer and IDB (2016), [Building a Bridge to Sustainable Infrastructure: Mapping the Global Initiatives that are Paving the Way](#), Mercer and Inter-American Development Bank

- Privcap (2016) [Why ESG to should matter to institutional investors](#), Privcap, New York
- PwC (2017) [Building Sustainable, Inclusive Transportation Systems: A Framework for the Future](#), PwC, London
- SIF – [Sustainable Infrastructure Foundation](#), Washington DC. Founder of the [SOURCE](#) infrastructure project preparation platform
- TCFD – [Task Force on Climate-related Financial Disclosures](#), Financial Stability Board, Basel
- UNCTAD (2015), Investing in Sustainable Development Goals: Action Plan for Private Investments in SDGs, UNCTAD, Geneva

PRI INFRASTRUCTURE ADVISORY COMMITTEE

The PRI's Infrastructure Advisory Committee oversees and advises the PRI on the Infrastructure Work Stream. Members are appointed for two to three years (two for investment managers, three for asset owners). Infrastructure Work Stream working groups and projects fall under the oversight of the Committee.

2017 MEMBERS OF THE INFRASTRUCTURE ADVISORY COMMITTEE

- Adrian Best, Victoria Funds Management Corporation
- Vikram Bhaskar, GCM Grosvenor
- Millie Chow, British Columbia Investment Management Corporation
- Isabelle Combarel, SWEN Capital Partners
- Martin Ewald, Allianz Global Investors (co-chair)
- Kristian Fok, CBUS Superannuation Fund
- Adam Heltzer, Partners Group
- René Kassis, La Banque Postale Asset Management
- Andrew Major, HESTA Super Fund (co-chair)
- Vhahangwele Manavhela, Public Investment Corporation
- Leisel Moorhead, QIC
- Chris Newton, IFM Investors
- Katarina Romberg, AMF Pension
- David Scaysbrook, Quinbrook
- Carl Tishler, Beshertine
- Zaman Velji, British Columbia Investment Management Corporation
- Mark Wayment, InfraRed Capital Partners

The Principles for Responsible Investment (PRI)

The PRI works with its international network of signatories to put the six Principles for Responsible Investment into practice. Its goals are to understand the investment implications of environmental, social and governance (ESG) issues and to support signatories in integrating these issues into investment and ownership decisions. The PRI acts in the long-term interests of its signatories, of the financial markets and economies in which they operate and ultimately of the environment and society as a whole.

The six Principles for Responsible Investment are a voluntary and aspirational set of investment principles that offer a menu of possible actions for incorporating ESG issues into investment practice. The Principles were developed by investors, for investors. In implementing them, signatories contribute to developing a more sustainable global financial system.

More information: www.unpri.org



The PRI is an investor initiative in partnership with UNEP Finance Initiative and the UN Global Compact.

United Nations Environment Programme Finance Initiative (UNEP FI)

UNEP FI is a unique partnership between the United Nations Environment Programme (UNEP) and the global financial sector. UNEP FI works closely with over 200 financial institutions that are signatories to the UNEP FI Statement on Sustainable Development, and a range of partner organisations, to develop and promote linkages between sustainability and financial performance. Through peer-to-peer networks, research and training, UNEP FI carries out its mission to identify, promote, and realise the adoption of best environmental and sustainability practice at all levels of financial institution operations.

More information: www.unepfi.org



United Nations Global Compact

The United Nations Global Compact is a call to companies everywhere to align their operations and strategies with ten universally accepted principles in the areas of human rights, labour, environment and anti-corruption, and to take action in support of UN goals and issues embodied in the Sustainable Development Goals. The UN Global Compact is a leadership platform for the development, implementation and disclosure of responsible corporate practices. Launched in 2000, it is the largest corporate sustainability initiative in the world, with more than 8,800 companies and 4,000 non-business signatories based in over 160 countries, and more than 80 Local Networks.

More information: www.unglobalcompact.org

