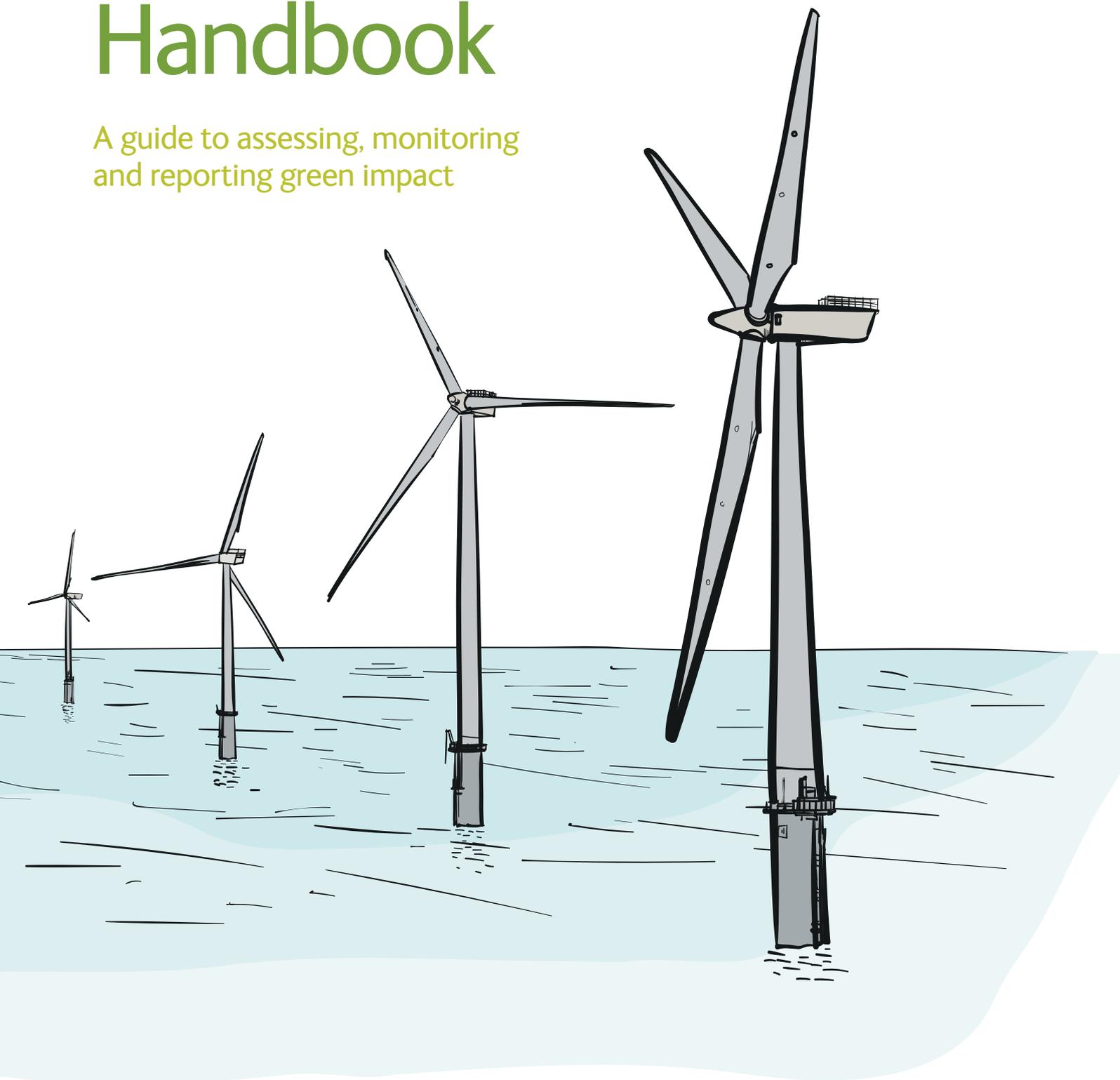


Green Investment Handbook

A guide to assessing, monitoring
and reporting green impact



The UK Green Investment Bank plc was established by the UK Government and is the first bank of its kind in the world. We finance infrastructure projects which are green and profitable.

As the most active investor in the UK, we finance complex and challenging projects, large and small, which need our help to go ahead. Between them, these projects generate renewable power, reduce energy use and carbon emissions, and keep waste out of landfill.

Mobilising private capital

Since inception we have worked with over 70 co-investors to drive investment in the UK's green economy. For every £1 we have invested, we have brought in £3 of additional private capital. Our Financial Conduct Authority (FCA) authorised subsidiary has now reached first close on a new offshore wind fund, attracting new investors to the UK's offshore wind sector.

Innovating so others can follow

We are leading the way in financing the deployment of new technologies, helping to create new markets, and building new financial products. Because we are doing this on fully commercial terms we are encouraging other private investors to join us and follow us.

Delivering a UK-wide impact

Our activity is supporting the introduction of innovative technologies on a large scale, strengthening the UK's supply chain, creating thousands of new jobs, and helping to lower the cost of renewable energy and energy efficiency.

Working internationally

We are working with the UK Government's Department for Energy and Climate Change on a £200m pilot programme to invest in renewable energy and energy efficiency projects in South Africa, East Africa and India.

Managing green investments

We take the green performance of our investments as seriously as their financial performance. We have developed a market-leading suite of principles, policies and processes to ensure that we consistently assess, monitor and report the green performance of each project, across a range of sectors and technologies.

The Green Investment Handbook is our manual, setting out and explaining the practical tools we use day-in, day-out to quantify and report the environmental benefits – the 'green impact' – of our investments. This is our proven methodology created to support the global transition to a low carbon economy.

Our mission is to support the transition to a low carbon economy as a means of addressing the challenge of climate change. That transition will require an improvement in and greater standardisation of green impact assessment.

We are playing a leading role in driving that process of change and improvement. This handbook is part of that. We hope it will be used by others, including mainstream investors, seeking a robust yet simple approach to achieving greater consistency in standardising green investment impact assessment, monitoring and reporting.

Foreword



Shaun Kingsbury
Chief Executive
UK Green Investment Bank

2015 is the 'Mexico Year in the UK' and 'UK Year in Mexico'. Activities of all kinds have been organised to celebrate and deepen our countries' economic, financial, political, cultural and social ties. Within the framework of the Dual Year Mexico-UK, the UK Green Investment Bank (GIB) and Nacional Financiera S.N.C., I.B.D. (NAFIN) formalised their relationship by signing a Memorandum of Understanding in October 2015.

This partnership demonstrates Mexico's efforts to boost sustainable development and NAFIN's commitment to foster and finance sustainable projects across the country, as well as GIB's commitment to sharing knowledge to promote green investment on an international scale.

GIB provides financial solutions to accelerate private sector investments in the UK's green economy. GIB supports green infrastructure projects which would not otherwise go ahead. NAFIN supports small and medium sized enterprises (SMEs) in Mexico and finances federal government-backed sustainable initiatives, such as renewable and clean energy projects.

Both organisations are committed to helping their countries make the transition to a greener economy and are working together to exchange information and expertise regarding potential renewable energy and energy

efficiency projects in Mexico. GIB has extensive experience in offshore wind and energy efficiency projects that can serve as a reference to NAFIN. Currently, NAFIN finances wind farms, solar parks, mini-hydro dams, and energy efficiency projects for households and SMEs.

As part of this knowledge sharing, GIB and NAFIN collaborated to release a Spanish version of the Green Investment Handbook. The handbook, written by GIB, aims to share its experiences and encourage debate on how to assess, monitor and report green financing. In addition, the handbook attempts to provide a practical template for businesses looking to make green investments. By reaching the Spanish speaking community in Latin America and the Caribbean, GIB and NAFIN hope to encourage institutions to invest in climate change adaptation and mitigation projects. With this handbook, NAFIN aims to provide tools to strengthen understanding of green financing and to increase investment in the fields of renewable energy and energy efficiency.

This document summarises the full version of the Green Investment Handbook, which is available to download from the GIB website. Details can be found at the end of this document. We hope you find this summary useful, a starting point, and a guideline for your institution to invest in green and profitable projects.



Jacques Rogozinski
General Director
NAFIN

The Green Investment Handbook

The Green Investment Handbook provides a consistent and robust means of assessing, monitoring and reporting the green performance of investments. Each section – Assess, Monitor, and Report – sets out practical tools and best practice methodologies to support the large-scale mobilisation of climate finance required from the mainstream investment community to achieve both financial and green returns.

Assess

Forecast green impact



How to assess and forecast green performance and risk as part of the investment decision

Monitor

Actual and forecast green impact



How to monitor progress against forecast following an investment decision

Report

Actual and forecast green impact



How to disclose and report actual and forecast green performance data

Assess

This section of the handbook describes how to assess the green and responsible investment impact and risks of projects prior to investment, as part of the due diligence process.

The process described below will enable a project's forecast green performance to be assessed against a defined set of investment criteria and the associated risks to be considered. It also shows how to implement suitable legal covenants to enable the appropriate data to be obtained.

Projects require suitable assessment to be conducted in a manner appropriate to the geography, sector, risk and the size of the proposed investment. Consideration should be given to the investment's material alignment with the environmental, social and governance investment criteria, including specific low carbon criteria within any policy or mandate requirement (here collectively termed Green Investment Policy).

Establish a Green Investment Policy with specific low carbon criteria

The investor should develop and make publicly available a set of policy requirements, investment criteria, and/or stated objectives against which potential projects can be assessed for alignment. The policy could include: statement of investment principles; assessment criteria; covenants; monitoring; disclosure; applicable standards (e.g. IFC Performance Standards and Equator Principles); commitment from senior management/periodic review.



Assess the project and management team capability against alignment to policy requirements

The investment should be considered against the stated objectives and/or policy requirements. The investee management team should be interviewed to consider capability, capacity and commitment to meet stated objectives.

Request performance data

Project performance data should be requested from investee management. This includes the project's forecast renewable electricity and/or heat generation or demand reduction, and project life. The forecast carbon savings associated with the project can then be considered. This task can be integrated into the scope of works for a consultant (see below).

Scope of works for consultant

In addition to assessing the potential green impact, where appropriate, environmental and social experts can be appointed to support in the due diligence. For some investors (such as Equator Principles financial institutions), engagement of consultants for an expert review of any environmental and social documentation will be likely be a requirement regardless of any green impact considerations.

Green risk

The risk that the project may not deliver the forecast green impact should be considered. The formal risk assessment framework is also a useful method to include risks associated with non-

carbon related aspects such as non-compliance with investment criteria and other environmental and social issues associated with a specific project. Taken together, this can be termed 'green risk'. Material green risks identified during this process should be mitigated in an action plan (see below) and/or included in any post-financial close monitoring (see 'Monitor' overleaf).

Action plans

Where the due diligence process identifies gaps or non-alignment to an investor's policy or other standards, an action plan should be agreed with investee management. This can include costing/budget (Capex or management time) required to meet the objectives of the action plan. A good action plan should be specific, measurable, achievable, realistic and time-bound ('SMART').

Green covenants

A crucial aspect of being able to monitor and report the green impact is the integration of green covenants into the formal financing/loan documentation. These must have equal legal status and recourse to enforcement measures as with any other financial covenant.

Investment decision

The findings of the due diligence along with forecast green performance and green risk assessment should be considered as part of any investment decision making (e.g. within Investment Committee). After financial commitment is made, projects should be subject to monitoring as described in the next section.



Monitor

This section of the Handbook details how to monitor the green performance of portfolio projects, including issues initially identified through the due diligence process.

Once funding to a project has been provided, the performance of the project is monitored. The process described here shows how to monitor the green impact and green risks, including compliance with agreed covenants and environmental and social project-related risks.

In addition, investees should provide regular operational updates/reports, which will consistently address the progress for the expected green impact, and other environmental and social measures. Specific requirements will depend on the characteristics of the investment, the geography, its sector and size of investment.

Annual green reporting

Annually the investee should complete a report which details the forecast and/or actual performance of the project. This report should include all relevant source data and references required for audit purposes. The report can be prepared or verified by an independent consultant (see 'Independent monitoring/right to access').

Material event reporting

Investee projects should also report material environmental and social events and accidents to the investor as soon as possible (with associated details of any mitigation and/or actions taken to address the issue). The investor should consider these ad-hoc events and in consultation with investee management, then assess if there is a requirement for remediation or mitigation action at the project.

Independent monitoring/right to access

As part of the covenants agreed, investors should retain an independent environmental and social expert to conduct periodic monitoring reviews/ verification of:

1. Green risks;
2. Action plan;
3. Forecast and actual green impact performance (CO₂e saved and MWh generated/saved);
4. On-going compliance with wider environmental and social covenants.

Equator Principles financial institutions may also have additional environmental and social monitoring requirements not listed here.

Aggregation of monitoring data

Once the data from the projects has been collected and verified by an independent consultant as appropriate, it can be aggregated for external reporting to stakeholders, as described opposite.



Report

This section of the handbook describes how to collect, verify and report the data on portfolio projects' performance on green and responsible investment matters.

Calculation methodology: overall approach

It is critical that a project's performance is reported to stakeholders on a periodic basis. The process described here builds on global standards and established reporting processes. The environmental benefit arising from a project is estimated by comparing the project's impact against an alternative outcome (scenario) if the project in question had not taken place. This alternative outcome is referred to as the 'counterfactual'. Green impact is calculated by subtracting the project footprint from the counterfactual footprint and can be applied to greenhouse gas savings (tonnes CO₂e) and energy demand reduction (MWh).

Renewable energy generated (GWh) is reported as the project's net power generated.

Reference guidelines

In calculating the green impact, the Greenhouse Gas Protocol For Project Accounting Guidelines¹ should be used for reference.

For energy efficiency projects, the guidance set out in the International Performance Measurement and Verification Protocol² (or other such defined energy efficiency protocol as applicable) should be referred to.

¹ <http://www.ghgprotocol.org/standards/project-protocol>

² <http://www.evo-world.org>

Further information

For further information and support download the full Green Investment Handbook from our website (full details overleaf).

Guidelines, checklists and templates

The full online handbook includes a series of guideline documents, checklists and spreadsheet templates – from guidance on due diligence and how we assess risk to example green covenants – and then reporting frameworks and green impact calculation methodologies.

Adoption and implementation

In order to benefit from the full added-value and risk reduction elements of the handbook, investors are encouraged to implement and integrate this handbook framework within their existing processes. Some investors may require support to do this. The UK Green Investment Bank has trained a panel of consultants in implementation of the handbook. These consultants will be able to support on bespoke implementation of the handbook as required.

It is also noted that full implementation of the handbook may not be appropriate for some investors. Therefore the handbook can be implemented in part, or in stages, e.g. pilot testing a subset of investment activity/portfolio before potential wider roll-out.

For details of trained consultants and other enquiries about using the handbook please find our contact details overleaf.

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