

The GBP Impact Reporting Working Group

Suggested Impact Reporting Metrics for Sustainable Water and Wastewater Management Projects

June 2017

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The GBP Impact Reporting Working Group consisted of the following organisations during mid-2016 to mid-2017:

Working Group Coordinators:

BlackRock
EBRD

Working Group Members:

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Green Bonds

Working Towards a Harmonised Framework for Impact Reporting For Sustainable Water and Wastewater Management Projects

May 2017

Introduction

The overall goal of the green bond market is to promote and amplify the important role that financial markets can play in helping to address environmental issues. By explicitly specifying the environmentally beneficial projects to which the bond proceeds are directed, Green Bonds allow investors to assess and direct capital to environmentally sustainable investments. It is assumed that the green bonds referred to in this document are aligned with the Green Bond Principles (“GBPs”)¹. The GBP help enhance the integrity and transparency of environmental finance, including through recommending impact reporting.

In December 2015, a working group of eleven International Financial Institutions (IFIs) published a “Harmonized Framework for Impact Reporting”². The framework outlined core principles and recommendations for impact reporting in order to provide issuers with reference and guidance for the development of their own reporting and provided core indicators and reporting templates for energy efficiency and renewable energy projects.

This document builds on the previous framework and outlines a harmonised framework for impact reporting on sustainable water and wastewater management projects (including sustainable infrastructure for clean and/or drinking water, sustainable urban drainage systems and river training and other forms of flooding mitigation). This is one of the ten broad categories of eligibility for Green Projects under the GBP 2017. The document summarises the conclusions of an informal technical working group,³ which has received broader input through the Impact Reporting Working Group convened by the GBP Executive Committee. It has been requested by many in the investor community, as reflected both in the GBP and in the responses to the formal consultation conducted by the GBP in 2016.

The GBP recommend the use of both qualitative performance indicators and, where feasible, quantitative performance measures with the disclosure of the key underlying methodology and/or assumptions used in the quantitative determination. This document provides **core quantitative indicators for sustainable water and wastewater management projects as well as reference reporting templates** that issuers can adapt to their own circumstances. These templates make reference to the most commonly used indicators, however, the working group acknowledges that other indicators might be relevant as well.

All recommendations, indicators and templates need to be compatible with different approaches to the management of proceeds, which can be based on allocations to either individual projects or project portfolios.

This document does not, at this stage, cover impact reporting on the broader range of water management projects that may be linked to environmentally sustainable management of living natural resources and land use, as well as climate change adaptation. However, the authors of this document acknowledge the importance of harmonisation also for such projects and for projects pursuant to the remaining GBP categories, for which additional suitable indicators will need to be developed in the future.

¹ See: <http://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/green-bonds/>

² See: <http://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/20151202-0530-FINALRevised-Proposal.pdf>

³ Participants: European Bank for Reconstruction and Development (EBRD), International Bank for Reconstruction and Development (IBRD), Kreditanstalt für Wiederaufbau (KfW), and Nordic Investment Bank (NIB).

Suggested Impact Reporting Metrics for Sustainable Water and Wastewater Management Projects:

The indicators proposed herein aim to capture and illustrate the environmental and sustainability benefits of projects relating to sustainable water and wastewater management, which are recognised by the GBP (2017) for Green Projects under one of the ten broad categories of eligibility for Green Projects:

“sustainable water and wastewater management (including sustainable infrastructure for clean and/or drinking water, wastewater treatment sustainable urban drainage systems and river training and other forms of flooding mitigation)”.

Relevant projects may also reference categories focused on pollution prevention and control, environmentally sustainable management of living natural resources and land use, as well as climate change adaptation.

The proposed indicators are designed to facilitate quantitative reporting at a project and/or at a portfolio level across geographies. The importance of the geographic context in the assessment of solutions reinforces the benefit of providing additional contextual information. We therefore encourage disclosure on the local and regional context, including river basin or regional sea specific baselines, to help understand the environmental impacts/benefits of the project in its context. Additional qualitative reporting is also encouraged.

It is recognised that water use, wastewater treatment and energy consumption are often closely interlinked, and therefore where such projects result in energy savings, these, and related Greenhouse Gas reductions, can be reported using the “Core indicators for Energy Efficiency and Renewable Energy and reference reporting templates” available on the GBP Resource Centre under “Impact Reporting”:

<http://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/20151202-0530-FINALRevised-Proposal.pdf>

For meaningful aggregation of indicators across projects, consistency in the methods of calculation, baselines and benchmarks would be required. Thus for the purpose of data quality, issuers are encouraged to disclose additional technical reports and/or data verification protocols where additional information could be provided as well as links to the sources of such data and methods of calculation.⁴

⁴ For example, the International Benchmarking Network for Water and Sanitation Utilities (IBNET) is the world largest database for water and sanitation utilities performance data. <https://www.ib-net.org/> or guidance on definitions and data sources for water-related metrics that are commonly used by companies to disclose aggregated data at site or company level, such as the [Global Reporting Initiatives G4 standard water metrics](#).

Core Indicators for Sustainable Water and Wastewater Management

A. Sustainable Water Management - Water Use Sustainability and Efficiency Projects

#1) Annual water savings

- *Annual water savings for example from:*
 - *reduction in water losses in water transfer and/or distribution*
 - *reduction in water consumption of economic activities (e.g. industrial processes, agricultural activities including irrigation, buildings, etc.)⁵*
 - *water re-use and/or water use avoided by waterless solutions and equipment, (e.g. for sanitation, cooling systems for power plants, industrial processes, etc.)*
- *Indicators:*
Annual absolute (gross) water use before and after the project in m³/a, reduction in water use in %

Benchmarks:

- *Internationally recognised benchmark standards for water use efficiency (e.g. EU Directives and Best Available Techniques reference standards or industry/sector good/best practice standards)*
- *The Water Exploitation Index Plus (WEI+) or internationally recognised tools such as WRI's Aqueduct, and the WWF's Water Risk Filter*
- *The average monthly water consumption as a percentage of the sustainable basin water*

B. Wastewater Treatment Projects (including Sewage Sludge Management)

#2) Annual volume of wastewater treated or avoided⁶

- *Annual amount of:*
 - *wastewater treated to appropriate standards or raw/untreated wastewater discharges avoided*
 - *wastewater avoided, reused or minimised at source*
- *Indicators:*
 - *Annual absolute (gross) amount of wastewater treated, reused or avoided before and after the project in m³/a and p.e./a and as %*

Population equivalent (1 p.e.) or 60 g of BOD₅ (EU definition)

⁵ Improvements in sustainable water management may also come via small interventions (e.g. distributed sustainable water assets include composting toilets, low-flow water fixtures, efficient washing machines, micro-irrigation systems and rainwater tanks).

⁶ Water and wastewater projects may be deemed to have multiple benefits which can be broken out or reported according to the most meaningful impact. For instance, a project may be reported solely as a reduction in Water Consumption (under A.#1 of this template), or by differentiating between the water use avoided and the generation of wastewater avoided.

Core Indicators for Sustainable Water and Wastewater Management (ctd)

#3) Treatment and disposal and/or reuse of sewage sludge

- *Treatment, disposal and/or reuse of sewage sludge (according to country legislation compatible with internationally recognised standards):*
 - *Sludge that is treated and disposed of (e.g. dewatering, sanitisation, composting, digestion without biogas extraction)*
 - *Sludge that is reused (e.g. digestion with biogas recovery, phosphorous recovery, agriculture use, co-combustion)*
- *Indicators:*
 - *Annual absolute (gross) amount of raw/untreated sewage sludge that is treated and disposed of (in tonnes of dry solids p.a. and in %)*
 - *Annual absolute (gross) amount of sludge that is reused (in tonnes of dry solids p.a. and in %)*

Note: Projects which involve sludge that is dumped in landfill or stored in the waste water treatment plant (WWTP) premises or sludge that is recycled without approved safeguards will be excluded. In portfolio reporting, this may be combined with utilisation, recycling and/or disposal of other types of (solid) waste for one aggregated figure.

Benchmarks:

- *Internationally recognised benchmark standards for wastewater/effluent quality at discharge and treatment efficiency (e.g. EU Directive, HELCOM recommendations or national standards)*
- *Total discharges in m³ or p.e. (if known) or concentrations of pollutants (BOD₅ and/or N_{tot} and/or P_{tot}) in the recipient surface water body (a river basin, a lake or a regional sea)*
- *Water quality indices, such as UN Global Water Quality Index (WQI), could be used to characterise the baseline environmental conditions of the recipient surface water body*

Other Sustainability Indicators for Sustainable Water Management Projects

#1) Improved water supply infrastructure and facilities and/or improved quality of the supplied drinking water as a result of the project

- *Indicators:*
 - *Number of people with access to clean drinking water (or annual volume of clean drinking water in m³/a supplied for human consumption) through infrastructure supporting sustainable and efficient water use (where average consumption per person is consistent with internationally recognised standards for sustainable water use)*

Benchmarks:

The definition of “clean drinking water” follows internationally recognised drinking water quality standards, such as WHO or EU.

#2) Improved sanitation facilities that have been constructed under the project

The increase in the share of the population connected to wastewater collection and treatment systems helps in domestic water pollution abatement, and prevents long lasting environmental damage to the aquifers.

- *Indicators:*
 - *Number of people with access to improved sanitation facilities under the project*

Benchmarks:

The definition of “improved sanitation facilities” follows the UNICEF-WHO Joint Monitoring Program definition.

#3) Improved measures to reduce the risk from adverse flooding impact

This may include, for example, improved hydrometeorological forecasting, improved early warning systems, infrastructure for flood mitigation (levees and reservoirs), flood zoning and improved basin planning.

- *Indicators:*
 - *Number of people and/or enterprises (e.g. companies or farms) benefitting from measures to mitigate the consequences of floods and droughts*

#4) Sustainable land and water resources management (SLM) systems in place

SLM for the preservation and restoration of natural landscapes (such as floodplains, forests, watersheds, and wetlands) will be site-specific as different areas require different interventions. These may include land use regimes (e.g. watershed plans, soil and water conservation zones); agronomic and vegetative measures (e.g. intercropping, afforestation); water-efficient irrigation; structural measures (e.g. flood control and drainage measures, water harvesting, run-off management, gully control measures); and/or active recharge by upstream activities to ensure a sustainable quantity of water. Land area may not be considered a pertinent indicator for localised actions that are not significant at a watershed level.

- *Indicators:*
 - *Area covered by sustainable land and water resources management practices*
 - *Annual catchment of water (m³/year) that complies with quantity (m³/year) and quality (e.g. turbidity) requirements by utilities.*

Illustrative Summary Template for Project-by-Project Report:

Sustainable Water Management Projects	Signed Amount a/	Share of Total Project Financing b/	Eligibility for green bonds	Sustainable Water Management component	Allocated Amount c/	Project lifetime d/	#1) Annual absolute (gross) water savings e/		Other Indicators
<i>Project name f/</i>	<i>currency</i>	<i>%</i>	<i>% of signed amount</i>	<i>% of signed amount</i>	<i>currency</i>	<i>in years</i>	<i>in m3/a</i>	<i>in %</i>	~No. of people with access to clean drinking water (or volume of clean drinking water in m ³ /a) through infrastructure supporting sustainable and efficient water use ~Number of people, or enterprises benefitting from measures to mitigate the consequences of floods ~Area covered by sustainable land and water management ~annual catchment of water (in m ³ /a)
e.g. Project 1	XX	XX	XX	XX	XX	XX	XX	XX	

Wastewater Treatment Projects	Signed Amount a/	Share of Total Project Financing b/	Eligibility for green bonds	Sustainable Wastewater Management Component	Allocated Amount c/	Project lifetime d/	#2) Annual absolute (gross) amount of wastewater treated, reused or avoided e/			#3) i) Annual absolute (gross) amount of raw/untreated sewage sludge that is treated and disposed of e/		#3) ii) Annual absolute (gross) amount of sludge that is reused e/		Other Indicators
<i>Project name f/</i>	<i>currency</i>	<i>%</i>	<i>% of signed amount</i>	<i>% of signed amount</i>	<i>currency</i>	<i>in years</i>	<i>in m3/a</i>	<i>in p.e./a</i>	<i>in %</i>	<i>in tonnes of dry solids p.a.</i>	<i>in %</i>	<i>in tonnes of dry solids p.a.</i>	<i>in %</i>	~No. of people with access to improved sanitation facilities
e.g. Project 2	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	

Notes:

- a/ Signed amount represents the amount legally committed by the issuer for the project or component that is eligible for green bond financing.
- b/ This is the share of the total project cost that is financed by the issuer. Issuers may also report the total project cost. When aggregating impact metrics only the pro-rated share should be included in the total.
- c/ This represents the amount of green bond proceeds that has been allocated to disbursements on the project.
- d/ Based on either the expected economic life or financial life of the project, if applicable. Issuers should disclose the reporting basis used.
- e/ The methodology and assumptions used should be disclosed for calculations in quantitative reporting.
- f/ Confidentiality considerations may restrict the project level detail that can be disclosed, but issuers should aim to report the list of projects and either project level or aggregate level committed and allocated amounts and core indicator amounts.

Illustrative Summary Template for Portfolio-based Report:

Sustainable Water Management Portfolios	Signed Amount a/	Share of Total Projects Financing b/	Eligibility for green bonds	Sustainable Water Management component	Allocated Amount c/	Average Portfolio lifetime d/	#1) Annual absolute (gross) water savings e/		Other Indicators
Portfolio name	currency	%	% of signed amount	% of signed amount	currency	in years	in m ³ /a	in % (weighted average)	~No. of people with access to clean drinking water (or volume of clean drinking water in m ³ /a) through infrastructure supporting sustainable and efficient water use ~Number of people, or enterprises benefitting from measures to mitigate the consequences of floods ~Area covered by sustainable land and water management ~annual catchment of water (in m ³ /a)
e.g. Portfolio 1	XX	XX	XX	XX	XX	XX	XX	XX	

Wastewater Treatment Portfolios	Signed Amount a/	Share of Total Project Financing b/	Eligibility for green bonds	Sustainable Wastewater Management Component	Allocated Amount c/	Average Portfolio lifetime d/	#2) Annual absolute (gross) amount of wastewater treated, reused or avoided e/			#3) i) Annual absolute (gross) amount of raw/untreated sewage sludge that is treated and disposed of e/		#3) ii) Annual absolute (gross) amount of sludge that is reused e/		Other Indicators
Portfolio name	currency	%	% of signed amount	% of signed amount	currency	in years	in m ³ /a	in p.e./a	in % (weighted average)	in tonnes of dry solids p.a.	in % (weighted average)	in tonnes of dry solids p.a.	in % (weighted average)	~No. of people with access to improved sanitation facilities
e.g. Portfolio 2	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	

Notes:

- a/ Signed amount represents the amount legally committed by the issuer for a portfolio of projects or components that are eligible for green bond financing.
- b/ This is the share of the total project cost financed by the issuer. Issuers may also report the total project cost. When aggregating impact metrics only the pro-rated share should be included in the total.
- c/ This represents the amount of green bond proceeds that have been allocated for disbursements to the portfolio.
- d/ Based on either the expected economic life or financial life of the project, if applicable. Issuers should disclose the reporting basis used.
- e/ The methodology and assumptions used should be disclosed for calculations in quantitative reporting.