



EXECUTIVE SUMMARY

SOLVING SUSTAINABLE DEVELOPMENT GOALS RUBIK'S CUBE

AN IMPACT-BASED TOOLKIT
FOR ISSUERS AND INVESTORS





Contents

Foreword

Editorial

Acknowledgements

Natixis Green & Sustainable Hub

Introduction

References

Contact



CHAPTER 1. UNTANGLING THE SUSTAINABLE DEVELOPMENT GOALS' RUBIK CUBE

A. The Agenda 2030: how relevant and actionable for issuers and investors? | p.12

- What role and appropriation by businesses
- Interview Global Compact France

B. Issuers and investors' appetite for SDG contribution measurement p.16

C. Investors survey results | p.21

- Why, what and who
- Key takeaways
- The quantitative results and open-ended answers

Special acknowledgements for their interviews and contributions through case studies

Icade, Daphné MILLET

Région Ile-de-France, Manuel THOMAS

Essilor, Xavier GALLIOT

Ministry for an Ecological and Solidarity Transition, Elise CALAIS

Sustainable Development Solutions Network (SDSN), Guido SCHMIDT-TRAUB

Global Compact France, Anthony RATIER

Institut du Développement Durable et des Relations Internationales (IDDRI), Elisabeth HEGE

CONTENTS OF THE FULL REPORT AVAILABLE UPON REQUEST



CHAPTER 2. THE CONTEXT-BASED APPROACH PROPOSED BY NATIXIS

A. A spectrum of approaches split into 3 categories | p.30

B. Our overarching goal | p.31

C. Our generic approach in 2 phases split into 10 steps | p.32

D. Our ingredients | p.36

- Geospatial analysis: localization matters
- SDG gaps data providers
- Interlinkages
- Stakeholders segmentation

E. Our tools | p.59

- Sectorial matrix and actionable targets identification
- SDG contribution chain and claim instruments
- Navigating indicators complexity with our indicator book



CHAPTER 3. A CROSS-ASSET METHODOLOGICAL TOOLKIT

A. SDG contribution measurement p.73

- Asset level: the best-suited for our approach
Case study Region IDF: tramway line T4
Reporting assessment grid
- Corporate level: hard to gauge
Equity contribution is twofold
Case study Icade
Case study Essilor
- Overview of ESG agencies' SDG solutions
- Portfolio level contribution measurement: in its infancy
- Tracking policies and progress at local government level

B. Financing solutions | p.126

- Projects or identified expenditures lending
Tools: GBP/SBP Addendum for Corporate Green, Social or Sustainable Bonds Frameworks and template for SDG-based reporting
- Sovereign SDG bonds
Joint interview IDDRI & SDSN

C. Investments solutions | p.138

- Investment case with sovereign bonds on SDG 4- Education
- Equity index – SDG Basic services cluster

CONTENTS OF THE FULL REPORT
AVAILABLE UPON REQUEST

FOREWORD

THIS REPORT, THE FIRST OF NATIXIS GREEN & SUSTAINABLE HUB' CENTER OF EXPERTISE, AIMS AT MULTIPLE AUDIENCES AND WAS DESIGNED AS A "SWISS ARMY KNIFE" TO ADDRESS SUSTAINABLE DEVELOPMENT GOALS CONTRIBUTION ASSESSMENT

With a sustainable finance mindset and building on the ongoing work of several actors – namely the IMCA, the Global Compact, the UN SDSN –, we have formulated a conceptual approach declined into an actionable methodology. We identified existing tools and proposed new ones. Our proposals are anchored into the conviction that contribution claims must be evidenced. From the early stages of this collective piece of work, we stick to the irrefutable fact that the SDGs were designed and agreed by and for governments, and that their adaption into actionable tools for businesses requires to build upon the territorial ties companies or projects have. Although all the UN States are equal in their commitment to the SDGs, they are unequal in the distance to reach them, requiring to factor in achievement gaps.

To be realistic in our approach and proposals, we started by surveying investors to understand their SDG commitments and expectations. These first-hand insights came from 42 investors accounting a total AuM of ~USD14tn. Two takeaways of this poll are that their expectations in terms of SDG contribution from companies are far from being met. Meanwhile, they are all committed to further integrate the SDGs in their portfolio management and a large portion of them already has SDG funds.

Our methodology in 2 phases split into 10 steps really flourishes when used at strategy or project design stages. However, as disclosure and reporting are the hothouse for innovation and breakthrough approaches, it can be used ex post, to assess the contribution of a project or a program already commissioned. Our approach is asset-class agnostic. It can be used as template for impact reporting, as "tips box" to help companies identify, prio-

ritize and improve their SDG footprint, as outline for designing SDG bonds or loans framework, as a canvas to design fixed-income and equity investment solutions.

In the end, this report is mostly a call for action, and efforts. We, collectively, -companies, banks, ESG agencies, governments- are not delivering yet what is needed to achieve the 2030 Agenda. Above all, we should retain ourselves from claiming SDG progresses that we cannot decently prove. Integrity is at the heart of Natixis Green & Sustainable Hub value proposition, intertwined with innovation. Thereupon, I would like to thank the numerous contributors to this report, first and foremost, the Region Ile-de-France, ICADE and Essilor, who collaborated to the forging of granular case-studies that test our methodology. Our report also presents and uses extensively the solutions developed by ISS-Oekom, Vigeo Eiris, Beyond Ratings, MSCI, Trucost, with whom we had very beneficial exchanges along the way. I would also like to thank experts from Global Compact France, IDDRI and the SDSN, whose Insights enriched the perspective. Lastly, the work carried by the SDSN is very valuable, and the indexes and dashboards they propose is instrumental in our proposed context-based approach.



Orith Azoulay

Natixis, Global Head of Green & Sustainable Finance

INTRODUCTION

September 2018 marks the 3rd anniversary of the 2030 Agenda for Sustainable Development that was agreed upon in September 2015 by 193 countries. A common commitment that applies abroad and domestically for governments, inwardly and outwardly for companies. It has since proven to be a rallying point for governments, businesses and investors. It is on this occasion that Natixis Green & Sustainable Hub's Center of Expertise has chosen to release its first flagship report titled "Solving the Sustainable Development Goals Rubik's Cube – An impact-based toolkit for issuers and investors".

Under conditions we have tried to clarify, the 2030 Agenda could serve as unifying framework to tie together the disparate actions of governments, corporations, entrepreneurs, investors, and NGOs on sustainability. This publication aims at spurring methodical innovation. It identifies and proposes actionable tools for embedding SDG footprint assessment into corporate strategy and funding or portfolio management and avoid evidence-less contribution claims.

To strengthen the legitimacy of green and sustainable finance instruments, we believe the market urgently needs to factor in territorial anchorages, baselines and stakeholders' situations. We are stepwise shifting from a situation where impacts were once considered as a by-product of investments, mostly for reporting purposes, to a situation where impact is at the heart of investment strategies and even more where investments are instrumental to delivering impacts. Over the last year, pension and sovereign wealth funds, major banks and wealth managers, have declared their alignment with the SDGs. In this context, we have launched a survey to investors to better understand their expectations. It was answered by 42 investors with an estimated total of assets under management of ~USD14tn. The report presents and discusses the results of this survey and our recommendations are built on it to address financial community' needs and demands.

The SDG paradigm is plunging us into the era of geospatial investing that pays attention to impact intentionality, intensity, additionality and transformative spill-over. An investment displayed as theoretically "making a difference" is no longer enough. There are questions that need answers: "as compared to what", "where", "upon whom" and "how much". The SDGs are a formidable tool to apprehend those yardstick concerns. While all the UN States are equal in their commitment to the SDGs, they are unequal in the distance to reach them.

We have tried to dissipate the "fog of SDG washing" and clarify terminologies, to do so we have distinguished three shades of impact / contribution - relate to, align with, contribute to the SDGs - with their subsequent levels and natures of claim and likelihood. There is a long journey to go from the superficial use of the SDG stickers to the grail of evidence-based causation. Measuring impact in the strict technical sense of being able to attribute causality is complex, often inconclusive, and costly. Is my input trickling down to outcome and impact? Are there other change dynamics or pathways at work that obstruct SDG achievement? Moreover, the question of the negative impacts of my actions, activities or projects, what is called in interlinkages in SDG terminology, is often eluded.

Through our asset-class agnostic methodology and approach, we try, whenever possible to stick to SDG spatial achievement gaps, either where a project occurs or where a company has a strong foothold. Case studies and guidelines to design frameworks are proposed. We would like to thank the participants, especially the Region Ile de France, ICADE and Essilor. Other experts and SDG protagonists gave us their views on specific questions, such as SDG fiscal budgeting and sovereign bonds, and we wish to thank them as well. Lastly, our products engineers formulated some investment solutions applying our methodology, both on fixed-income (SDG 4 education and sovereign debt) and on equity (cluster of the SDG 2 end hunger, 3 good health and well-being, and 6 clean water and sanitation).

**Natixis Green & Sustainable Hub
(GSH)**



THE RESULTS OF OUR SDG SURVEY OF INVESTORS: HIGH BUT UNMET EXPECTATIONS

■ Why, what and who

In our efforts to tackle the issue of a consistent and non-superficial integration of the Sustainable Development Goals (SDGs) in capital markets, we wished to thoroughly take into account the appetite and expectations from the actors positioned upstream in the investment chain, and that have a considerable leverage to set integrity standards: investors.

Over the last year, pension and sovereign wealth funds, major banks and wealth managers, have declared their alignment with the SDGs. However, little information was available about their satisfaction when it comes to investees' SDG contribution demonstration.

Our survey of investors thus aimed at knowing how, in practice, SDGs are used or could be used for portfolio management. This survey was conducted online from August 1st 2018 to September 13th 2018, and gathered 42 respondents, whose firms account for a total AuM of ~USD14tn.

Amongst the firm respondents, the following institutions have kindly accepted to disclose their participation to our survey: Affirmative Investment Management, AlphaFixe Capital, Amundi, ASN Bank, AXA Investment Managers, BlackRock, BlueBay Asset Management, CM-CIC Asset Management, Degroof Petercam Asset Management, Ecofi Investments, Erste Asset Management, Humanis Gestion d'Actifs, Impax Asset Management, Kempen Capital Management, La Financière de l'Echiquier, La Française Group, Legal & General Investment Management, Mandarin Gestion, Mirova, Newton Investment Management, NN Investment Partners, OFI Asset Management, Robeco, Schroders, SCOR Investment Partners, Trusteam Finance, Sycomore Asset Management, UBS Asset Management, WHEB Asset Management, Zurich Insurance.

The first question allowed us to gain specific information on our respondents (location, name of the firm, etc.), but we wished to keep this survey anonymous, which is why that information will not be disclosed and the results presented below start from Question 2.



■ Key takeaways of our survey of investors

If 50% of our respondents (survey answered by 42 investors representing a total AuM of ~USD14tn) declared to have formal commitments to the SDGs, the range of options to integrate them varies greatly. Around 40% of them reportedly have SDG funds and/or mandate. Practices are diverse in terms of maturity and ambition, from *“adopting SDG to report on CSR policy”*, *“mapping of environmental sub-sectors and portfolios to the SDGs”*, to *“the reweighting of indicators across sectors according to the SDGs in investor’s proprietary tool”* and *“incorporation of living wage, climate change and other SDG related agenda for decision making”*.

All the SDGs are not equal in the heart of investors, the SDGs 7, 13, 3, 9,6, (in descending order) are considered as “highly investable” by more than 40% of the respondents versus less than 10% for the goals 4, 10, 5, 1,2. Moreover, despite for instance a strong interest for the SDG 15 life on land, few investment opportunities seem to exist *“(…) as it does not fit so well in market mechanisms. Land restoration and organic farming could be two options but for the first one, it usually comes with biodiversity damaging activities, for the second one, impacts are not clear”*.

To overcome superficial usage of the SDGs, it seems pivotal to address the lack of disclosure from investees, on both activity indicators (% of turnover, geographical breakdown of sales of products, segmentation of the customer base) and extra-financial impacts. An investor wisely declared *“there is no Stern report for SDGs, nor a Kyoto Protocol for how to measure them.... nor a CDP to gather all the data”*. SDG contribution reporting varies in quality, and when data is, in fact available, there is often no disclosure of calculation methodology, in such a way that contribution is only “presumed”. According to one respondent of our survey *“most companies disclose [their impact] at input level, the most advanced at the output level, but it is getting better”*. Another one estimates that around 40% of companies in their portfolio do not report on impact.

The investors unanimously pointed out the challenges of creating common standards for measuring SDG footprint: overlaps, double-counting, lack of comparable data, diversity of topics and situation covered... But, ironically (?), for almost 60% of the respondents, the use of SDGs as a measure of contribution would encourage impact-reporting harmonization. As one respondent even said: *“SDGs is [arguably] one of the best way to report about impact at a portfolio level”*. Meanwhile, the voice is quite unanimous on the importance of ex-post reporting. There is a growing demand for comparison between ex ante plans (intended objectives) and effective results. An investor stated: *“goals and objectives are only providing a roadmap but impact at are the very end of the chain. Reporting is ex post and should reflect what has been achieved”*. Another difficulty pinpointed by our respondents is the way to aggregate data at portfolio level. When it comes to the SDG 7, one of our respondent asked mischievously: *“Do you compare BP to Shell, or to Orsted?”*. At portfolio level, most investors declared that they have metrics for environmental impact reporting (except for biodiversity where the demand is not addressed), but no social impact KPIs. Still, some of our respondents mentioned some initiatives of impact-scoring using the SDGs.

The concern of SDG-washing (on both corporate and investor side) is as present as the green-washing concerns with green-bonds, if not more. One respondent asserted that *“SDGs are not quantitative enough and too exposed to green washing by companies”*. Another one stated that *“SDGs have been signed by countries, not by companies. Although it is clear that companies have their share in contributing in the achievement of the SDGs it is much more the countries/states that should be in the forefront”*. This is in fact sensible, as “green or environmental” SDGs (goals 6, 7, 11, 14, 15) only represent roughly 30% of the SDGs. This leaves significant room in other social and sustainable fields for vague and evidence less good intentions. As one respondent pointed out, *“would companies that are engaged in GMOs contribute to fight hunger?”* Interlinkages are not really considered despite acknowledgement that it’s an issue: *“BP- the company helps one SDG but detracts from another”*. The base-line and spatial dimension seems promising for investors but largely unaddressed, as stated: *“SDGs highlights gaps identified as of current state and everybody is claiming to be already aligned with the ultimate goals! Market player should first perform their own gap analysis to identify then how / where to act efficiently.”* Another investor responded that *“listed companies offer very few options to actually fight against hunger as defined by the gap analysis behind the SDGs”*.

In the end, SDGs could offer effective tools to change the way impact is commonly apprehended. Using SDGs as more than just tools for reporting, but for outright strategy purposes, would prompt companies to have, as one respondent of our survey accurately phrased, *“a holistic value chain view”*, considering both inward (operational footprint) and outward impacts (outbound related to products and services), that are comprised in the SDGs.

A SPECTRUM OF APPROACHES SPLIT INTO 3 CATEGORIES

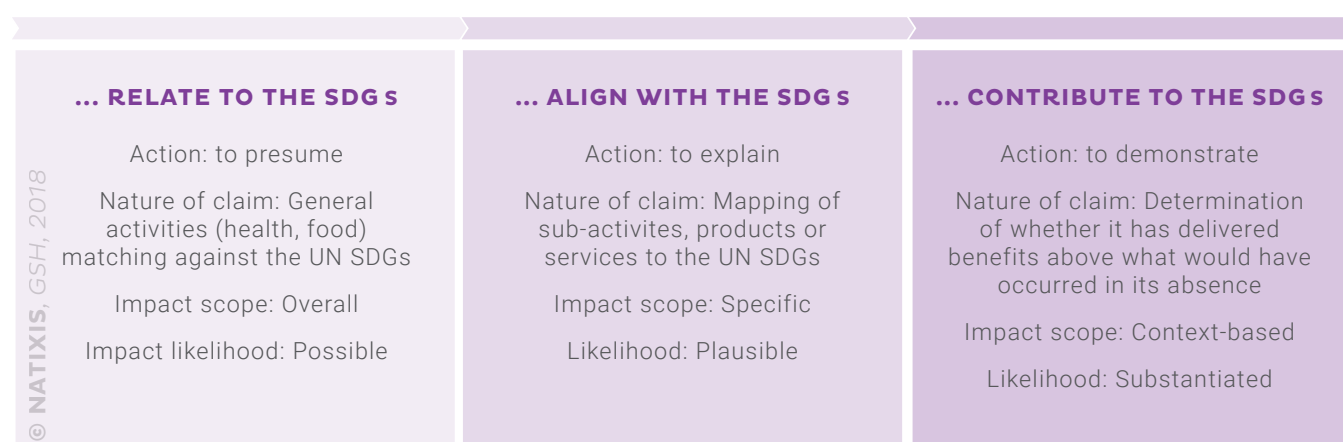
One's impact likelihood on advancing the Sustainable Development Goals (SDGs) is in ascending order: possible, plausible or substantiated. Simply put, it is not the same to claim you are a food company that has a range of self-proclaimed low-fat yogurts than it is to actually disclose the nutrient certification and sales figure of those yogurts. Let alone to disclose the results, methodology and sample underlying a customers' survey concluding their body mass index (BMI) has improved after having consumed your low-fat yogurts over a certain period.

There is a myriad of expression used by enterprises and investors to describe their action towards the achievement of the Sustainable Development Goals. Among them, the most recurrent are: "to be consistent with", "to echo", "to relate to", "to be connected with", "to align with", "to contribute to".

We tried to solve this lexical confusion by distinguishing three main categories although it is more a sort of continuum with porosity among them. In a nutshell, you can either presume, explain or demonstrate your intended impact on / contribution to the SDGs.

■ TOOL 1: NATIXIS GSH THREE SHADES OF SDG APPROACHES

A company, a project or a product could...



For instance, to effectively demonstrate your activity increase the access to a basic service, you should try to disclose the number of unique client individuals who were served by your organization and provide access, during the reporting period, to products/services they were unable to access prior to the reporting period. To the least, you could publish affordability metrics (cost reduction expressed in % for your products and services as compared to a benchmark or the original situation). This demonstration approach touches a number of long debated notions / aspirations in responsible and green finance: imputability, additionality, accountability.

The example of child labor

For a sovereign state that wants to objectivize its contribution and/progress towards the achievement of the UN SDG target 8.7 – "Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms" – solely ratifying the ILO Convention No. 182 on the worst forms of child labour (1999) will not consist in a "demonstration".

Specific budgets, programs to increase the number of onsite controls and lawsuits against infringers will add to the demonstration.

If in the aftermath of those measures, a decrease of child labor is evidenced by statistics from third party or independent institutions, the contribution will be substantiated.

This seems obvious but in practice, the contribution claims, both from the public and the private sector, are rarely applying this type of self-explanatory rigor.

OUR OVERARCHING GOAL

Cherry picking is a widespread practice when it comes to the SDGs. It refers to selecting goals and targets based on what is the most obvious for companies rather than what accounts for the highest priorities and is the most material. Be it at asset or at organizational levels, considering potential obstruction to the SDGs is vital (see the section on interlinkages). Boilerplate disclosure and nice SDG stories are not enough to use the incredibly rich tool that are SDGs. The shortcomings of focusing on few projects that belong to philanthropy are obvious. SDG contribution reporting should not be anecdotal but rather reflect strategy decision and realities for a significant portion of resources (investments, HR) allocated by a company. More systematic evidence of results is asked as demonstrated in our survey of investors.

How to overcome the challenge of non-superficiality and avoid SDG Washing?

A large portion of investors are in the process of “aligning” themselves with the SDGs—namely publicly committing that a share of their investments addresses the issues outlined in one or more of the goals. Nevertheless, few have attempted to measure whether they are meaningfully contributing to their progress. Indeed, albeit some investors report how their investments relate to specific SDGs, they are often not attempting to delineate and pinpoint specific and contextualized influence towards achievement of the goals or measuring the effectiveness of such attempts.

Often, SDG contribution claiming is an afterthought box ticking exercise and a post-deployment reconstitution. Within the three shades of impact afore-identified, we single out existing tools and propose new ones to implement the third shade, the more demanding and ambitious of the three: demonstrate contribution to the SDGs. It involves at some point paradigm shift whereby it does not involve assessing ex post the consequences of virtuous actions (afterthought approach), but rather to start with a diagnosis, and then express a clear intention / objective of contribution. In the first case, it is a reporting focused approach, in the second case, it is a strategic approach.

We propose to start from what the SDGs are by essence: An Agenda agreed by states and for states, even if it calls on the private sector for implementation. Thus, we bear in mind that the SDGs are attached to populations and territories, whose governments are held accountable for their progress, and are monitored as such. Geospatial foot printing is key to identify the SDG achievement gaps wherever there is a significant foothold (to consider a specific context) and clout, either a project level (project' location) or corporate level (customer base and/or workforce). Segmentation of stakeholders is whenever relevant and possible necessary. Nevertheless, we are aware of the limits of this approach, as acknowledged by NWB Bank in its Social Bonds Newsletter 2017: *“Most indicators are output and outcome-based. Direct evidence of socio-economic impact effects are difficult to claim because they are hard to isolate and correlate directly with investments at this macro-level.”*

In our view, it is preferable to use the term “assessment” rather than measurement. Indeed, assessment insists on capturing the whole process of contribution, from setting goals and benchmark targets (intention and planning), to measuring impact against the expectations defined at investment, to sharing the results of that measurement with investors and key actors and informing future allocations.

For the Natixis Green & Sustainable Hub, legitimately and robustly claiming a contribution to SDGs achievement requires

To demonstrate the **progress over a lapse of time** [insofar as targets are time-bound and it is a dynamic process, which requires a comparison from a baseline to an end line] **in a given location and upon specific stakeholders** [employees, riverside population, end-customers] of **SDGs and sub-targets** [evidenced by outcome or impact KPIs, ideally third-certified] **imputable with a certain degree of attribution** [demonstration of a link to correlation and ideally causality] to the operational activities of a company, its services, products, or a specific project, that was **non-detrimental** to the **achievement of other SDG and sub-targets** [attention paid to interlinkages and tradeoffs]



OUR GENERIC APPROACH IN 2 PHASES SPLIT INTO 10 STEPS

In an attempt to build a measure of impact that was solid and differentiated from other more superficial approaches we established a sequence of steps that, in our opinion, would be a consistent way to demonstrate contribution to the Sustainable Development Goals.

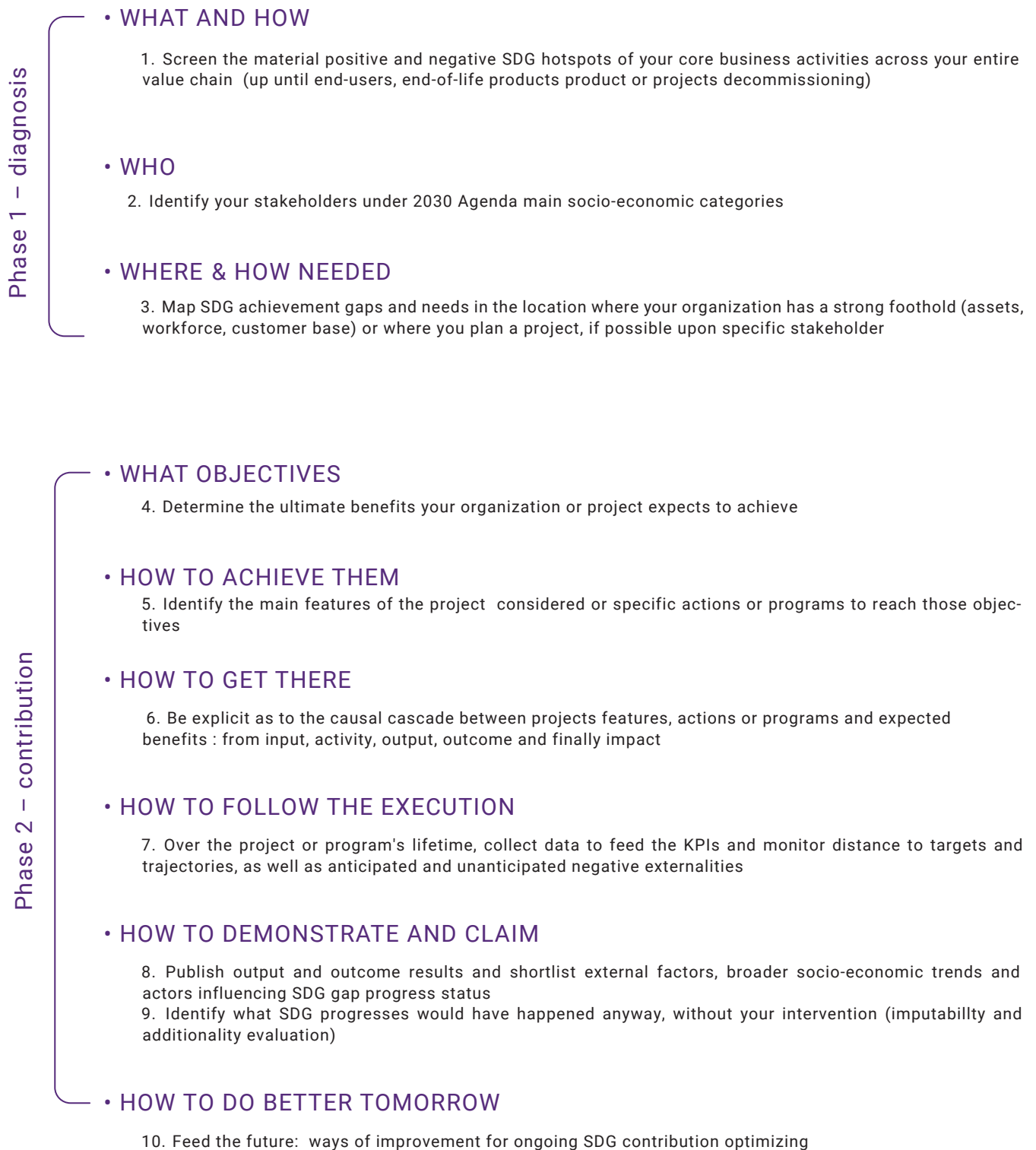
Our two-phase and ten-steps methodology can be a useful tool to design a reporting that demonstrates real impact as we understand it, meaning gaps-oriented, taking into account location and population, and demonstrating real additionality.

However, we think that **the optimal use of this canvas for organisations is upfront : use it as a monitoring tool**, to build a robust theory of contribution, for business / operational strategy purposes or even green or sustainable financing framework designs.

The key principles at the heart of our methodology are materiality analysis, stakeholders factoring, localizing SDG gaps, interlinkages, baselines, attribution and claim.

■ TOOL 2: NATIXIS GSH GENERIC APPROACH IN 2 PHASES SPLIT INTO 10 STEPS

The simplified version of your generic 2 phases approach split into 10 steps.



Note that our full generic approach encapsulates the 10 proposed steps with implementation details, lists the available tools and presents possible deliverables.

OUR INGREDIENTS

■ Geospatial analysis: localization matters

Localizing the SDG gaps and needs is necessary to assess additionality and transformative intensity. An impact is defined by a change, which itself requires a baseline in the sense of an initial situation. Geospatial information and the identification of baselines are critical to demonstrating additionality. It is a determinant as to whether an investment has delivered benefits above what would have occurred in absence of the investment. Indeed, a wind farm unleashes more transitioning spill-over in Poland (where the renewable energy in final consumption stands at 11.9%), than in Portugal (renewable energy in final consumption: 27.2%). Similarly, a wastewater treatment plant brings more disruption and benefits in Romania (wastewater treated: 22.8%), than in Denmark (86.7%).

■ SDG gaps data providers

The UN Sustainable Development Solutions Network (SDSN)

Sub-national dashboards and indexes

EU Social Index

■ Interlinkages

Tradeoffs, synergies, ripple effects, must be taken into account when trying to advance the SDGs. It is what we called interlinkages in this report. It consists in disentangling interactions between the SDGs. Tools are needed to anticipate and deal with the unintended consequences of an action or project, it is the only way to guarantee the indivisible nature of the 2030 agenda. Either at the asset or organizational level, considering potential obstruction to the SDGs is vital.

The lack of awareness of inter-linkages brings with it the risk that progress towards one goal occurs at the expense of another. In concrete terms, reliance on fossil fuels to expand access to energy (SDG 7) could exacerbate climate change and ocean acidification, undermining progress in climate action (SDG 13) and in ocean conservation (SDG14), as well as contributing to health problems (SDG 3). Promoting industrialization but without contributing to ocean acidification, matters. Idem, increasing transport opportunities without compromising health outcomes (SDG 3.6 and 3.9). Several SDGs are concerned with protecting biodiversity and the environment but are presented separately from the food security goal. Conversely, there are some SDGs that are key enablers to the achievement of the other goals by laying the right empowering foundations.

■ Stakeholders segmentation

Sub-national dashboards and indexes Segmentation per categories is at the heart of the 2030 Agenda that aims to “leave no one behind”. The needs for localization and contextualization are key pillars to achieve the 2030 Agenda SDGs. Activities can indeed be performed at various scales and locations (global, national, sub national, city, economic zones, clusters...). A comprehensive approach to the SDGs must take into account, for each different activity, the whole value chain (support and primary activities from inbound to outbound), for every type of company. Disaggregation or segmentation is thus a key principle. Behind the value of an indicator for an entire population or a customer base can lay disparate realities, masked by, for example, a national average. In the diagnostic phase of our methodology, the indicators chosen to measure progress towards the achievement of SDG should be broken down according to relevant criteria such as gender, age, income, geography, employment, etc.

Those features are for example: employees, subcontractors, work-injury victims, rural vs. urban people, children, newborns, people living with learning disabilities, people living with physical disabilities, people living in poverty, long-term unemployed people, people living with addiction, people with long-term health issues, people living with mental health needs, vulnerable older people, vulnerable young people, refugees and asylum seekers, indigenous people, ecosystem and biodiversity, social trade or business, homelessness, animals...

■ The SDG contribution chain and claim instruments

The SDG contribution chain must be explicit as to how your actions trickle down to make an impact

■ TOOL 5: NATIXIS GSH SDG CONTRIBUTION CHAIN

	INPUT	ACTIVITY	OUTPUT	IMPACT	
				OUTCOME	CONTRIBUTION
Definition	Resources – capital, human – invested or deployed in service of a set of activities.	Concrete actions or tasks that are performed in support of specific impact objectives	Tangible, immediate practices, products and services that result from the activity undertaken	Changes, or effects, on individuals or on the environment, resulting from the activity, and the delivery of products and services	Effects on a broader target population. that result from outcomes that have been achieved.
Application / Example indicators	€, number of people	Development and implementation of a program, product, project, building new infrastructure	Measurable actions or conditions that evaluate progress against specific operational activities e.g. Number of customers reached, items sold	Measurable actions or conditions that demonstrate progress towards specific outcomes e.g. average journey time reduction)	Changes on society, segment of population, or the environment. Progress of a specific SDG goals or targets.
© NATIXIS, GSH, 2018					

Adapting the impact investing' s concept of theory of change to “SDG contribution”

We witnessed a pressing demand to **move stepwise from coincidental thematic matching to correlation and ultimately the causation grail. The term impact sounds consistent, meaningful.** It refers to the change brought about by an activity or an entity on people, the environment or the economy.

Within the impact evaluation profession, to assert that an intervention has an “impact” ordinarily requires **a significant degree of certainty of attribution**, proven for instance by the existence of a relevant control group against which to judge a counterfactual. Technically, it equals change that is caused by an intervention. To identify what would have occurred anyway without the intervention or project is a sort of prerequisite. **Nevertheless, measuring impact in the strict technical sense of “being able to attribute causality” is complex and costly.** In the hierarchy of results, it comes at the end, just after an outcome, that we could define as a change for clients or beneficiaries that is plausibly associated with the investee action.

OUR TOOLS

We have developed several tools for embedding SDG footprint assessment into corporate strategy and funding or portfolio management. Snapshots of several of them are given below to give you a glimpse of how they are framed.

OUR TOOLS

- **Tool 1:** Natixis GSH three shades of SDG approaches
- **Tool 2:** Natixis GSH generic approach in 2 phases split into 10 steps
- **Tool 3:** Natixis GSH SDG sectorial matrix
- **Tool 4:** Natixis GSH mapping of the most relevant targets for businesses and investors
- **Tool 5:** Natixis GSH SDG contribution chain
- **Tool 6:** Natixis GSH SDG indicators book
- **Tool 7:** Natixis GSH reporting assessment
- **Tool 8:** Natixis GSH addendum to the GBP and SBP for non-superficial integration SDG into frameworks

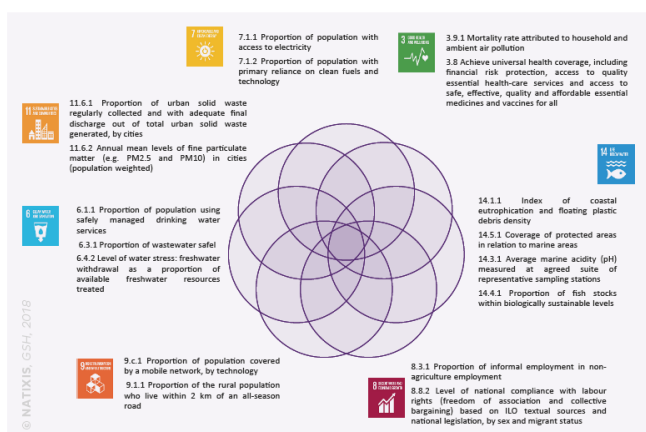
■ Sectorial matrix and actionable targets identification

To nurture the phase 1 – diagnosis – of our generic approach, especially the *in abstracto analysis*, we propose to use a matrix encompassing on one axis a universal list of sectors (for the sake of alignment with existing regulation, we used the same than the HLEG' list), and on the other axis the SDGs. It identifies the "significant positive impact and contribution" and "risks of obstruction or harmful impact".

See the snapshot of the complete matrix - tool 3 - on the right, and, below, tool 4, i.e. our mapping of the most relevant targets for businesses and investors (among the 169 official SDG UN sub-targets).

■ TOOL 4: NATIXIS GSH MAPPING OF THE MOST RELEVANT TARGETS FOR BUSINESSES AND INVESTORS

Among the 169 official SDG UN sub-targets, many, if not strictly applicable to the private sector, are very useful to enlighten the context in which companies operate. We have identified in the tool below the most actionable that are more granular and specific than the 17 goals. These could be used by companies for instance in their reporting. When enterprises carry their materiality analysis, they should look specifically at these targets.



■ TOOL 3 : NATIXIS GSH SDG SECTORIAL MATRIX

	✓ Significant positive impact and contribution																✗ Risks of obstruction or harmful impact													
MAIN SECTORS IDENTIFIED BY THE HLEG	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Electricity production	✓																													
Heat production and supply	✓																													
Electricity transmission, distribution and storage	✓																													
Industry																														
Products & supply chain activities	✓																													
Buildings	✓																													
Urban development																														
Transport	✓																													
Water supply, management & wastewater treatment	✓																													
Solid waste management	✓																													
Agriculture, husbandry, aquaculture & fisheries	✓																													
Forestry																														
Natural ecosystems																														
Education	✓																													
Healthcare																														
Information & communication technology	✓																													
Financial products & services	✓																													

■ Navigating indicators complexity

Sometimes, we misunderstand the “why” and “how” when it comes to data and indicators (data being raw materials, and indicators an analytical combination of data). A few questions are useful to be raised :

- Do you know why you are measuring?
- Do you know what you actually are measuring?
- What should be measured?
- What to do once you get the results?
- Who is your audience?

Facts: the SDGs are by nature relatively unfit for the private sector

The seventeen goals and one hundred sixty-nine targets as they stand are rarely straightforwardly transposable for use at the microeconomic and private-sector levels. Indeed, translation from SDG macro and public policy indicators into private sector indicator is challenging. Several respondents of our survey recalled the UN Goals were aimed more at policy makers than the investment community. We have identified the most actionable indicators across a large range of actors and institutions.

The criteria against which indicators are assessed in our “indicators book” (tool 6) are clustered under the two main phases we propose to follow (phase 1: diagnosis phase: 2 contribution). They range for instance from relevant perimeter (SSA or corporation, developing/developed countries), nature (input, output, outcome, etc.) and main features (risks vs. opportunities, geographical breakdown, additionality and accountability, time series availability, or affordability). They could be used to test indicators along the 10 steps, either to measure needs or gaps, to gauge efforts and/or to claim a contribution. Indicators are assessed as unfit (red dot), somewhat applicable (yellow dot), relevant (green dot) for each criterion.

■ TOOL 6: NATIXIS GSH SDG INDICATORS BOOK

© NATIXIS, GSH, 2018

	PERIMETER	NATURE	FEATURES
	Severely, supra national and agency Developed countries Corporation Micro or project level	Input Activity Output Outcome Impact Stocktaking / Situation Inward impact Outward impact (products and services) Opportunities (new markets) Risks (legal, social, military) Sensitive to intelligence Stakeholders segmentation Geographical breakdown Additional and accountability Reference and prone to comparison Time series availability In house data collection Third party data collection Robust calculation methodology Affordability to implement	
GENDER EQUALITY			
Total organization headcount held by men and women	•	•	•
Gender wage gap (total, % male median wage) : Difference between male and female median wages of full time employees and those self employed, divided by the male median wage.	•	•	•
Female years of schooling (% male)	•	•	•
WATER AND SANITATION			
Number of tons of clean water provided	•	•	•
Number of water infrastructure projects built (e.g. dams, reservoirs)	•	•	•
Population using safely managed water services (%)	•	•	•
AFORDABLE AND CLEAN ENERGY			
Share of renewable energies in final consumption (%)	•	•	•
Fuel Poverty (% of households unable to afford the most basic levels of energy for adequate heating, cooking, lighting and use of appliances in the home). In absolute sense, when more than 10% of the household income is spent on energy bills	•	•	•
Closing of fossil fuels powerplants (number of plants and capacity, with disclosure of information regarding reselling / decommissioning)	•	•	•
Carbon factor emissions of newly installed capacity in a location (country or region) as compared to the average carbon factor	•	•	•
DECENT WORK AND ECONOMIC GROWTH			
Reduction of the number of fatal accidents and workplace accidents leading to time off	•	•	•
Unemployment rate (%)	•	•	•
% of total employees covered by collective bargaining agreements or involved in staff representation (if no agreement)	•	•	•
Absenteeism	•	•	•
INDUSTRY, INNOVATION AND INFRASTRUCTURE			
Number of new accesses to high speed internet (i.e. downstream speeds equal to, or greater than, 256 Kbit/s)	•	•	•
Number of secure payment transactions processed in underserved markets	•	•	•
Proportion of “seismic” distributing water pipes (%)	•	•	•

Indicators • Unfit • Somewhat applicable • Relevant

© NATIXIS, GSH, 2018

	PERIMETER	NATURE	FEATURES
	Severely, supra national and agency Developed countries Corporation Micro or project level	Input Activity Output Outcome Impact Stocktaking / Situation Inward impact Outward impact (products and services) Opportunities (new markets) Risks (legal, social, military) Sensitive to intelligence Stakeholders segmentation Geographical breakdown Additional and accountability Reference and prone to comparison Time series availability In house data collection Third party data collection Robust calculation methodology Affordability to implement	
REDUCE INEQUALITY			
CEO Pay Ratio	•	•	•
Income of bottom 40% of population	•	•	•
MAKE CITIES INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE			
Quantity of public transport systems that were developed during the reporting period (in km)	•	•	•
Soil sealing rate (the covering of the ground by an impermeable material, including built area, road and pavement, mineral place, parking)	•	•	•
% of beneficiaries who report decrease time spent in public transportation	•	•	•
INDUSTRY, INNOVATION AND INFRASTRUCTURE			
Native biodiversity in built up area: the number of bird species that is listed in the urban area (built up areas include impermeable surfaces like buildings, roads, drainage channels, etc., and anthropogenic green spaces like roof gardens, roadside plantings, golf courses, private gardens, cemeteries)	•	•	•
Volume of processed general waste expressed in million tons per year	•	•	•
Unrecovered food waste (i.e. that ends up in a landfill, is incinerated without energy recovery or discharged in wastewater)	•	•	•
Amount of GHG emitted through the organization's operations during the reporting period (from direct and indirect sources)	•	•	•
Eggs and egg ingredients cage-free (%)	•	•	•
CLIMATE ACTION			
Flood and/or wind resilient floor space (in m²) constructed by the organization during the reporting period	•	•	•
Restoration of ecosystems: Surface of land that has been restored or protected (in ha) with capacities to reduce impacts of flooding (such as improved irrigation or drainage), with capacities to reduce desertification speed and sea level rising (such as green barriers, mangroves)	•	•	•
Amount of fossil-fuel subsidies per unit of GDP (production and consumption) and as a proportion of total national expenditure on fossil fuels	•	•	•

Indicators • Unfit • Somewhat applicable • Relevant

This grid can help to classify your existing indicators, to identify what your needs and constraints are. It intends to facilitate indicators classification, to strengthen the strategic use made of them and to spur benchmark. It is supposed to help companies and/or investors reviewing their existing indicators against their needs and constraints.

■ TOOL 7: NATIXIS GSH REPORTING ASSESSMENT

Our reporting assessment grid for green, social and sustainable bonds under the lenses of the Sustainable Development Goals (SDGs)

As presented in the section “**Issuers and investors’ appetite for SDG contribution and measurement**”, SDG reference and contribution claims are becoming a must have of a green & sustainable bond issuance framework. We even have started to see SDG bond frameworks appearing (e.g. BBVA, ANZ, etc.)

However, at issuance, SDG contribution statements are very theoretical (“in abstracto” as we call it in our methodology). It is thus almost impossible to make an educated judgement of those claims, going beyond an “in abstracto” diagnosis and definitely not an SDG contribution a priori evaluation.

Therefore, we believe that at this stage, it makes more sense to focus on green & sustainable bonds **reporting** to make a view on the issuances **alignment / contribution to SDGs**.

Based on Natixis Green & Sustainable research green bond issuance and reporting analysis grids (cf. “**Green & Sustainable Bond 4.0: Deep dive into Green & credit credentials**” March 8, 2018), we suggest here an adaptation of our reporting analysis grids to better address SDGs.

Thereafter are presented our Green Bond Reporting evaluation grid from our March 2018 study, and our addendum proposal to assess SDG contribution in a reporting.

■ ADDENDUM: ADDING SDG LENSES TO THIS “REPORTING ASSESSMENT GRID”

Snapshot of the Tool 8 (sub-category “Contextual Dimension”)

ASSESSING GREEN, SOCIAL OR SUSTAINABLE BONDS REPORTINGS UNDER THE LENSES OF THE SDGS		
I – CONTEXTUAL DIMENSION		
Geographical acuteness & stakeholders segmentation	SDG situation in the locations where the UoPs were allocated or where the issuer has a footprint (assets, liabilities, turnover etc.)	The reporting encompasses gaps identification, for each of the SDG supposedly addressed and advanced in the reporting. Alternatively , the reporting granularity allows for the identification of SDG gaps addressed by allocated projects, according to countries or local government SDG dashboards (for instance, from the SDSN index): Poor - The SDGs addressed by the projects are already “achieved” in the locations Medium - Challenges remain Good - Significant challenges remain Excellent - Major challenges remain Location not disclosed - the UoPs allocation geographical breakdown is not disclosed
	SDG trends in those locations	The reporting refers to actual SDG situations and evolutions or its structure. Alternatively , the reporting granularity allows such analysis to be made, using for instance the SDSN’s index trend analysis Good - At least one of the SDGs supposedly addressed in the reporting is undergoing a trend that is: Moderately Increasing, Stagnating or Decreasing No - All the SDGs supposedly addressed in the framework are undergoing a trend described or assessed as: On track, or Maintaining SDG achievement Location not disclosed
	Pioneering potential	Yes - At least one of the UoP in the reporting provides an innovative approach, allowing a target population to gain access to a product (physical goods or financial products), technology or financing structure that is new or not widely used. No - Already diffused and widespread service or product (processes or solutions that are not cutting edge and won’t allow leapfrogging in developing countries)
	Target population and/or beneficiaries	Vague - The target population is vaguely disclosed (e.g. excluded, poor, underserved people...) Precise - The target population is precise in terms (official definitions from statistics institute) of issue targeted and/or geography Very Precise - The target population is very precise and matches 2030 Agenda stakeholders categories (number of people, exact location, thresholds specifying their situation in terms of level of income, access to basic services, etc.) Target population not disclosed
Contextual ability to deliver	Institutional and political constraints	According to, for instance, the World Bank’s Worldwide Governance Indicators Yes - The countries where allocated projects are located have overall poor estimated scores in the categories: Control of corruption, Government effectiveness, Political Stability and Absence of Violence/Terrorism and Regulatory Quality No - The countries where allocated projects are located have overall good estimated scores in those categories Location not disclosed
	Social and environmental constraints	Is the issuer’s contribution hindered by weak leverage and limited influence on the situation ? Yes - Strong path dependency, in regions that are hard to reach, or with a population hard to work with (social instability, political turmoil) No - The matter at hand is really in the issuer’s control, whether it is a new enterprise or project, or for an existing project that is reversible and for which adjustments are possible. The issuer has a strong clout on the project and room for maneuver Location not disclosed

© NATIXIS, GSH, 2018

Snapshot of the Tool 8 (sub-category “SDG impact of the Use of Proceeds”)

ASSESSING GREEN, SOCIAL OR SUSTAINABLE BONDS REPORTINGS UNDER THE LENSES OF THE SDGS		
II – SDG IMPACT OF THE USE OF PROCEEDS		
Suitability for purpose	Relevance of the projects	For each of the SDG supposedly addressed in the reporting: Poor - Projects are undoubtedly not linked to the progress of the SDGs reportedly addressed (vague relation) Good - Projects are somehow linked to the progress of the SDGs reportedly addressed Excellent - Projects are fully linked to the progress of the SDG targets reportedly addressed
Contribution	SDG alignment or contribution approach	Within the reporting: Poor - Only the SDGs numbers and stickers are mentioned Medium - SDGs and relevant targets regarding the sector, industry, or location, are mentioned Good - SDGs, targets and related/relevant project and business KPI are mentioned Excellent - There is a real theory of change and contribution (at organization, intervention, or program level) that outlines the linkage from input, to activities, to output, to outcomes, and ultimately to impact, linked to SDGs targets and is backed by KPI
	KPIs, planning and trajectories for the intended contribution	Poor - No SDG related KPI for measurement of impact are given Medium - Few or weak SDG related KPIs are given (mostly inputs), no targets or base-lines are disclosed, no means of measurements are explained Good - SDG related KPI are disclosed (output, and outcome) but no base-line or target is disclosed Excellent - SDG related KPI are robust, disclosed for each projects/category of projects, the
Interlinkages	Disclosure and management of the interlinkages	Overall in the framework or at project management process level : Poor - Side-effects of the projects and potential spill overs upon other objectives are not assessed or with a narrow approach Medium - There is a life-cycle approach and attention paid to side effects without however counter-measures or clear demonstration of mitigation Good - Interlinkages are really embedded into risks management with solutions and counter-measures, substantiated with KPIs © NATIXIS, GSH, 2018

■ TOOL 8: NATIXIS GSH ADDENDUM TO THE GBP AND SBP FOR NON-SUPERFICIAL INTEGRATION OF SDG INTO FRAMEWORKS

As issuance of SDG self-labelled bonds is emerging in the market, and since SDG supposedly aligned green, social or sustainable bonds frameworks are more and more frequent (see in our Chapter 1, "issuers and investors' appetite for SDG contribution measurement"), the need for guidelines on how to structure a clear and robust SDG-linked framework is all the more obvious.

Moreover, if used correctly, SDGs can actually enhance green/social bonds frameworks, by adding accuracy, transparency to impact approaches and measurement but also by bringing additional consistency between green and social Use of Proceeds. With that in mind, we have developed a grid that can be used either to evaluate the level of SDG ambition of an already-published framework, or to structure the SDG alignment / contribution of a new framework.

Based on our "generic SDG contribution methodology", our addendum matches different levels of issuers' SDG ambition, preparedness or maturity. For each GBP/SBP principles that ought to appear in a framework (UoP, selection of eligible projects, management of proceeds, reporting), we suggest the additions that could be considered to better embrace SDGs.

Snapshot of the Tool 8
(section Use of Proceeds)

A) USE OF PROCEEDS	TOOLS
<p>Extracts from the GBP</p> <p><i>(Green projects) should be appropriately described in the legal documentation for the security. Provide an estimate of the share of financing vs. re-financing. Clarify which investments or project portfolios may be refinanced and the expected look-back period for refinanced Green Projects.</i></p>	
<p>Additional SDG Step</p> <p>+</p>	<p>Describe the eligible activities and their SDG footprint</p> <p>Level 0 - Map the category of projects only against SDGs numbers/stickers and/or titles</p> <p>Level 1 - Support your SDG contribution claim by mentioning the SDGs relevant targets regarding your sector, industry, or projects' features</p> <p>Level 2 - Match SDG & targets to actual identified projects and their expected output</p> <p>Level 3 - Demonstrate a real a theory of contribution that outlines the linkages with your activities, their input, planned output, intended outcomes, and ultimately the impact/contribution, linked to SDGs targets</p> <p>* ICMA "Green and social bonds: a high-level mapping to the sustainable development goals"</p> <p>* United Nations. Transforming our World: The 2030 Agenda for Sustainable Development. 2015</p> <p>* 169 UN SDG targets</p> <p>* Natixis GSH's SDG sectorial matrix</p> <p>* Natixis GSH's SDG contribution chain</p> <p>* SDG stakeholders segmentation analysis</p> <p>© NATIXIS, GSH, 2018</p>

Snapshot of the Tool 8
(section Reporting)

D) REPORTING	TOOLS						
<p>The annual report should include a list of the projects to which Green Bond proceeds have been allocated, as well as a brief description of the projects and the amounts allocated, and their expected impact.</p>							
<p>Complementary SDG Steps</p> <p>How ?</p> <p>+</p> <p>© NATIXIS, GSH, 2018</p>	<table> <tr> <td> <p>Identify baselines and sources used</p> <p>Level 0 - There is no referencing of qualitative or quantitative data</p> <p>Level 1 - Explicit reference indicators calculation methodology, data providers or sources in the framework, for instance for context-based analysis (SDG gaps)</p> <p>Level 2 - Additionality demonstration (identification of the SDG progress that would have happened anyway, without your intervention)</p> </td><td> <p>Baseline assessments</p> </td></tr> <tr> <td> <p>Quality and relevance of indicators</p> <p>Level 0 - little/no/unsatisfactory information on the indicators</p> <p>Level 1 - sufficient and satisfactory information on the indicators</p> <p>Level 2 - comprehensive and reliable information on the indicators</p> </td><td> <p>* Natixis GSH's SDG Indicators Book (different sections and uses)</p> <p>* KPIs' definition and calculation methodology</p> </td></tr> <tr> <td> <p>Commitments to report on interlinkages management</p> <p>Level 1 - Evidence of the detrimental side-impacts will be given but not third-party verified</p> <p>Level 2 - There will be a qualitative review of the interlinkages by a third-party</p> <p>Level 3 - There will be a quantitative review or institutional assessment of the interlinkages</p> </td><td> <p>Third-party assurance, longitudinal comparison, test group, surveys, consultation of beneficiaries</p> </td></tr> </table>	<p>Identify baselines and sources used</p> <p>Level 0 - There is no referencing of qualitative or quantitative data</p> <p>Level 1 - Explicit reference indicators calculation methodology, data providers or sources in the framework, for instance for context-based analysis (SDG gaps)</p> <p>Level 2 - Additionality demonstration (identification of the SDG progress that would have happened anyway, without your intervention)</p>	<p>Baseline assessments</p>	<p>Quality and relevance of indicators</p> <p>Level 0 - little/no/unsatisfactory information on the indicators</p> <p>Level 1 - sufficient and satisfactory information on the indicators</p> <p>Level 2 - comprehensive and reliable information on the indicators</p>	<p>* Natixis GSH's SDG Indicators Book (different sections and uses)</p> <p>* KPIs' definition and calculation methodology</p>	<p>Commitments to report on interlinkages management</p> <p>Level 1 - Evidence of the detrimental side-impacts will be given but not third-party verified</p> <p>Level 2 - There will be a qualitative review of the interlinkages by a third-party</p> <p>Level 3 - There will be a quantitative review or institutional assessment of the interlinkages</p>	<p>Third-party assurance, longitudinal comparison, test group, surveys, consultation of beneficiaries</p>
<p>Identify baselines and sources used</p> <p>Level 0 - There is no referencing of qualitative or quantitative data</p> <p>Level 1 - Explicit reference indicators calculation methodology, data providers or sources in the framework, for instance for context-based analysis (SDG gaps)</p> <p>Level 2 - Additionality demonstration (identification of the SDG progress that would have happened anyway, without your intervention)</p>	<p>Baseline assessments</p>						
<p>Quality and relevance of indicators</p> <p>Level 0 - little/no/unsatisfactory information on the indicators</p> <p>Level 1 - sufficient and satisfactory information on the indicators</p> <p>Level 2 - comprehensive and reliable information on the indicators</p>	<p>* Natixis GSH's SDG Indicators Book (different sections and uses)</p> <p>* KPIs' definition and calculation methodology</p>						
<p>Commitments to report on interlinkages management</p> <p>Level 1 - Evidence of the detrimental side-impacts will be given but not third-party verified</p> <p>Level 2 - There will be a qualitative review of the interlinkages by a third-party</p> <p>Level 3 - There will be a quantitative review or institutional assessment of the interlinkages</p>	<p>Third-party assurance, longitudinal comparison, test group, surveys, consultation of beneficiaries</p>						

INVESTMENTS SOLUTIONS

■ INVESTMENT CASE WITH SOVEREIGN BONDS ON SDG 4- EDUCATION

Why sovereign debts and Education? SDG goals are defined at state-level. In a quite obvious relationship, sovereign debts appear a very appropriate investment tools to finance government's efforts to reach their targets at country level. At sovereign debt level, we decided to give priority to SDGs for which we consider that the central/federal government has the ability to deliver material impact. It's the case for Education.

We acknowledge that Education is not the only field where governments represent the major actor to contribute in the achievement of the SDG goal. Yet, education hardly ever crosses minds when it comes to SDG-oriented investment, as opposed to SDG 7 – Affordable and clean energy, SDG 9 - Industry, innovation & infrastructure and SDG 13- Climate action.

For the purpose of this study, we use several official sources of information including the Sustainable Development Solutions Network (SDSN) Dashboards Report, OECD/PISA 2015 Results and OECD Database on Education. We also refer to Vigeo indicators for Sovereign ESG ratings. After crunching Education-related indicators and numbers, we developed a holistic Education scoring system that can be used for investment process which seeks positive contribution to SDG 4.

Our step-by-step methodology

In line with our developed framework for SDG diagnosis / contribution, our approach, here, is composed of two distinct stages with dedicated purposes.

The **Step 1** consists in defining the geographic areas where it makes most sense to take action. It means we don't consider countries that already met their target as most relevant candidates for our basket but rather the ones that are still far from reaching the goals.

This constitutes a very strong assumption, suggesting another vision of the "best-in class/universe" approaches, since, we give an overarching weight to the notion of SDG gaps, to both introduce the notion of impact and that of "investing where it's most needed". But we would also, of course, avoid states that do not provide efforts to achieve the goal as well as those that are not heading in the right direction.

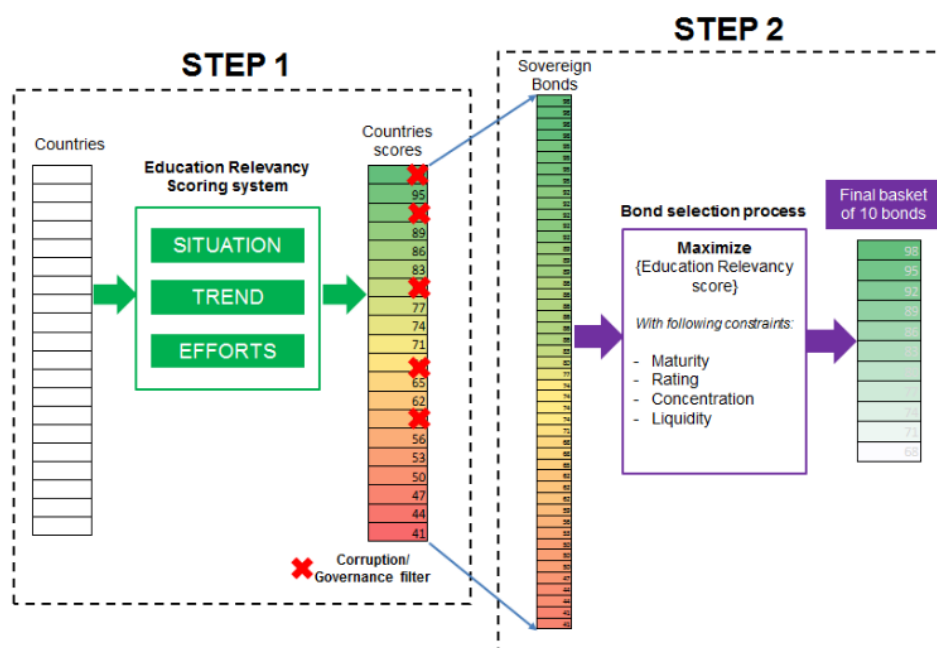
This Step 1 answers to three majors questions:

- Situation: How far is the country from their Education goal?
- Trend: How fast is the country moving towards its target?
- Efforts: How much of resources does the country roll out in order to reach the goal?

We finally exclude countries with material Corruption/governance risk and those for which missing data prevent from having a consistent assessment on the Education Relevancy score. As the outcome of the first step, we end up with an "Education Relevancy score" for each country.

The **Step 2** is a bond selection process with financial constraints. We build a basket that present the highest possible "Relevancy score" and comply with a certain number of practical constraints. As top performers in terms of "Education Relevancy" do not always abide by investor's constraints (risk, yield target, maturity, concentration), this step allows to take into account usual portfolio managements rules. At the end of this second step, we finally obtain a basket of bonds that meet both financial targets and optimized relevancy.

■ OUR APPROACH IN A NUTSHELL



■ Equity index – SDG basic services cluster



"SDG basic services cluster: factoring geographical footprint to reach universal access"

A step further in the SDG-based investment. The measurement of SDG contribution at corporate level requires a little more than ESG analysis legacy. An investment displayed as theoretically "making a difference and advancing the SDG" is no longer enough. There are questions that need answers: "as compared to what", "where", "upon whom" and "how much". The SDGs, and the distance to reach them, are a formidable tool to apprehend those yardstick concerns.

"Where" matters as much as "what". Equity contribution measurement is difficult to reach, notably the assessment of the footprint of all products and services, which presents the challenges of categorizing and localizing the sales/turnover. Through this double question mark, we aim at assessing, for each SDG, whether the products address the issue by 1/ its nature and 2/ the location of the sales, i.e. where the SDG needs related to those products are the most acute.

We distinguish inward contribution or obstruction to the SDGs, that refers to the internal sphere of the organization and its impacts through its own operations (upstream) and outward contribution or obstruction to the SDGs, that relates to the impact of the products and services sold (external/outbound focused). Although we acknowledge the necessity to integrate inward contribution, we chose in this specific study to focus on outward contribution, as the geographical breakdown data is for the moment limited to products/services sales and net income figures.

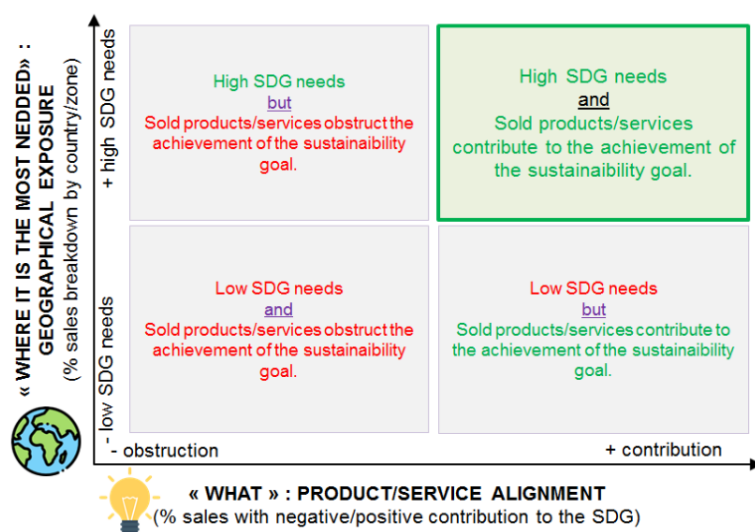
Why focusing on SDG Basic Services cluster? Our opinion is that attempting to embrace the 17 goals in the design of an equity investment solution has strong chances to dilute the targeting and purpose of such product. By contrast, it appeared to us that focusing on a cluster of few interconnected and tangible goals in their products and results was more in line with the overall SDG contribution methodology we have built and presented in this report. In particular, there are some SDGs that are key enablers to the achievement of the other goals by laying the right empowering foundations. We have chosen the 3 SDGs that are the most inextricably linked to the achievement of other goals: SDG 3 - Good health and well-being, SDG 6 - Clean water and sanitation, and SDG 7 - Affordable and clean energy.

Our methodology. We present in this study our methodology for selecting a basket of stocks that offer a positive contribution to achieve the SDG Basic Services cluster. The perimeter of the study is composed of the Stoxx Global 1800 members. Our methodology was driven by the following underlying questions for each company:

- **Do the products/services contribute to the achievement of the SDG?**
- **Where does the company operate?**
- **How important are the SDG Gaps in locations where the company operates?**

Some additional constraints also come under scrutiny:

- we exclude companies with products/services with net obstruction to one of the four sustainability goals in order to avoid harmful side-effects.
- we exclude companies with ESG rating in negative or risk categories, based on the ISS-ekom-Mirova rating methodology. This filter allows taking into account the global sustainability opinion of the corporates (environmental, social and governance).
- we limit the sector industry sector concentration of the portfolio at 10%. By the nature of their products/services, Health Care-related industries or Pharmaceutical companies have higher Target scores (even after our Adjustment treatment). For the purpose of this study, we favor diversification across sectors.
- we apply a double liquidity filter with a minimum market capitalization outstanding of eq. €1bn and a minimum turnover amount of eq. €10mn.



As the outcome of these successive steps, we end up with a basket of 50 tradable liquid stocks that bring positive contribution to the achievement of basic services goals in geographic areas where the issues are the most severe.

DISCLAIMER FOR MARKETING COMMUNICATION

Reference prices are based on closing prices.

The information contained in this publication and any attachment thereto is exclusively intended for a client base consisting of professionals and qualified investors. This document and any attachment thereto are strictly confidential and cannot be divulged to a third party without the prior written consent of Natixis. If you are not the intended recipient of this document and/or the attachments, please delete them and immediately notify the sender. Distribution, possession or delivery of this document in, to or from certain jurisdictions may be restricted or prohibited by law. Recipients of this document are required to inform themselves of and comply with all such restrictions or prohibitions. Neither Natixis, nor any of its affiliates, directors, employees, agents or advisers or any other person accepts any liability to any person in relation to the distribution, possession or delivery of this document in, to or from any jurisdiction.

This document is considered as marketing communication within the meaning of the AMF General Regulation. It has not been developed in accordance with legal requirements designed to promote the independence of investment research and its author(s) is/are not subject to any prohibition on dealing in the relevant financial instrument ahead of the dissemination of the marketing communication. The investments mentioned in this documentation may not be suitable for all types of investors.

This document and all attachments are communicated to each recipient for information purposes only and do not constitute a personalized investment recommendation. They are intended for general distribution and the products or services described herein do not take into account any specific investment objective, financial situation or particular need of any recipient. This document and any attachment thereto shall not be construed as an offer nor a solicitation for any purchase, sale or subscription. Under no circumstances should this document be considered as an official confirmation of a transaction to any person or entity and no undertaking is given that the transaction will be entered into under the terms and conditions set out herein or under any other terms and conditions. This document and any attachment thereto are based on public information and shall not be used nor considered as an undertaking from Natixis. All undertakings require the formal approval of Natixis according to its prevailing internal procedures.

This document and any attachment thereto are based on public information and shall not be used nor considered as an undertaking from Natixis. All undertakings require the formal approval of Natixis according to its prevailing internal procedures. Under no circumstances should this document be considered as an official confirmation of a transaction to any person or entity and no undertaking is given that the transaction will be entered into under the terms and conditions set out herein or under any other terms and conditions.

The information contained in this document may include results of analyses from a quantitative model, which represent potential future events that may or may not be realized, and is not a complete analysis of every material fact representing any product. Information may be changed or may be withdrawn by Natixis at any time without notice. More generally, no responsibility is accepted by Natixis, nor any of its holding companies, subsidiaries, associated undertakings or controlling persons, nor any of their respective directors, officers, partners, employees, agents, representatives or advisers as to or in relation to the characteristics of this information. The statements, assumptions and forecasts contained in this documentation and any attachment thereto reflect the judgment of its author, unless otherwise specified, and do not reflect the judgment of any other person or of Natixis.

Natixis shall not be liable for any financial loss or any decision taken on the basis of the information disclosed in this presentation and Natixis does not provide any advice, including in case of investment services.

In any event, you should request for any internal and/or external advice that you consider necessary or desirable to obtain, including from any financial, legal, tax or accounting adviser, or any other specialist, in order to verify in particular that the transaction described in this material complies with your objectives and constraints and to obtain an independent valuation of the transaction, its risk factors and rewards.

It should be noted that, in the context of its activities, Natixis may have positions in financial instruments and in the issuer concerned by the recommendations or opinions provided in this document or any attachment thereto.

Natixis can be remunerated for underwriting services, investment services, advice services and any other investment service

provision or banking activity and any other service related to financial instruments of the company or the companies mentioned in this document.

In this case, references made to conflicts of interests that Natixis and its affiliates may experience, with respect to the issuer(s) mentioned in this document are available on the website of the Research by clicking on the following link:

<https://www.research.natixis.com/GlobalResearchWeb/main/globalresearch/DisclaimersSpecifiques>

Natixis is supervised by the European Central bank (ECB).

Natixis is authorized in France by the Autorité de Contrôle Prudentiel et de Régulation (ACPR) as a Bank - Investment Services Provider and subject to its supervision.

Natixis is regulated by the Autorité des Marchés Financiers in respect of its investment services activities.

Natixis is authorized by the ACPR in France and regulated by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority in the United Kingdom. Details on the extent of regulation by the FCA and the Prudential Regulation Authority are available from Natixis' branch in London upon request.

In Germany, NATIXIS is authorized by the ACPR as a bank – investment services provider and is subject to its supervision. NATIXIS Zweigniederlassung Deutschland is subject to a limited form of regulation by the Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin) with regards to the conduct of its business in Germany under the right of establishment there. The transfer / distribution of this document in Germany is performed by / under the responsibility of NATIXIS Zweigniederlassung Deutschland.

Natixis is authorized by the ACPR and regulated by Bank of Spain and the CNMV (Comisión Nacional del Mercado de Valores) for the conduct of its business under the right of establishment in Spain.

Natixis is authorized by the ACPR and regulated by Bank of Italy and the CONSOB (Commissione Nazionale per le Società e la Borsa) for the conduct of its business under the right of establishment in Italy.

Natixis is authorized by the ACPR and regulated by the Dubai Financial Services Authority (DFSA) for the conduct of its business in and from the Dubai International Financial Centre (DIFC). The document is being made available to the recipient with the understanding that it meets the DFSA definition of a Professional Client; the recipient is otherwise required to inform Natixis if this is not the case and return the document. The recipient also acknowledges and understands that neither the document nor its contents have been approved, licensed by or registered with any regulatory body or governmental agency in the GCC or Lebanon.

All of the views expressed in this document accurately reflect the author's personal views regarding any and all of the subject securities or issuers. No part of author compensation was, is or will be, directly or indirectly related to the specific recommendations or views expressed in this document.

I(WE), AUTHORS(S), WHO WROTE THIS REPORT HEREBY CERTIFY THAT THE VIEWS EXPRESSED IN THIS REPORT ACCURATELY REFLECT OUR(MY) PERSONAL VIEWS ABOUT THE SUBJECT COMPANY OR COMPANIES AND ITS OR THEIR SECURITIES, AND THAT NO PART OF OUR COMPENSATION WAS, IS OR WILL BE, DIRECTLY OR INDIRECTLY, RELATED TO THE SPECIFIC RECOMMENDATIONS OR VIEWS EXPRESSED IN THIS REPORT.

The personal views of authors and analysts may differ from one another. Natixis, its subsidiaries and affiliates may have issued or may issue reports that are inconsistent with, and/or reach different conclusions from, the information presented herein.

Natixis, a foreign bank and broker-dealer, makes this document available solely for distribution in the United States to major U.S. institutional investors as defined in Rule 15a-6 under the U.S. securities Exchange Act of 1934. This document shall not be distributed to any other persons in the United States. All major U.S. institutional investors receiving this document shall not distribute the original nor a copy thereof to any other person in the United States. Natixis Securities Americas LLC, a U.S. registered broker-dealer and member of FINRA, is a subsidiary of Natixis. Natixis Securities Americas LLC did not participate in the preparation of this document and as such assumes no responsibility for its content. This document has been prepared and reviewed by employees by Natixis, who are not associated persons of Natixis Securities Americas LLC and are not registered or qualified as research analysts with FINRA, and are not subject to the rules of the FINRA. In order to receive any additional information about or to effect a transaction in any security or financial instrument mentioned herein, please contact your usual registered representative at Natixis Securities Americas LLC, by email or by mail at 1251 Avenue of the Americas, New York, NY 10020.

The stocks mentioned might be subject to specific disclaimers. Please click on the following link to consult them:

<https://www.research.natixis.com/GlobalResearchWeb/main/globalresearch/DisclaimersSpecifiques>



GREEN & SUSTAINABLE HUB

Contacts



Orith Azoulay

Natixis, Global Head of Green & Sustainable Finance
+33 1 58 55 52 05
orith.azoulay@natixis.com



Cédric Merle

Natixis, Expert, Center of Expertise, Green & Sustainable Hub
+33 1 58 55 30 55
cedric.merle@natixis.com



Hong-My Nguyen

Natixis, Strategist, Green & Sustainable Hub
+33 1 58 55 85 27
hongmy.nguyen@natixis.com



30, avenue Pierre Mendès France
75013 Paris, France
Tel. : +33 1 58 32 30 00
www.cib.natixis.com

