EXECUTIVE SUMMARY

SOLVING SUSTAINABLE DEVELOPMENT GOALS RUBIK’S CUBE

AN IMPACT-BASED TOOLKIT FOR ISSUERS AND INVESTORS

SEPTEMBER 2018 CENTER OF EXPERTISE
SOLVING SUSTAINABLE DEVELOPMENT GOALS’ RUBIK CUBE

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

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CONTENTS OF THE FULL REPORT AVAILABLE UPON REQUEST
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 flourish 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, prioritize 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 Île-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.
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 anchorage, 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).
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.


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 baseline 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

<table>
<thead>
<tr>
<th>... RELATE TO THE SDGS</th>
<th>... ALIGN WITH THE SDGS</th>
<th>... CONTRIBUTE TO THE SDGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action: to presume</td>
<td>Action: to explain</td>
<td>Action: to demonstrate</td>
</tr>
<tr>
<td>Nature of claim: General activities (health, food) matching against the UN SDGs</td>
<td>Nature of claim: Mapping of sub-activities, products or services to the UN SDGs</td>
<td>Nature of claim: Determination of whether it has delivered benefits above what would have occurred in its absence</td>
</tr>
<tr>
<td>Impact scope: Overall</td>
<td>Impact scope: Specific</td>
<td>Impact scope: Context-based</td>
</tr>
<tr>
<td>Impact likelihood: Possible</td>
<td>Likelihood: Plausible</td>
<td>Likelihood: Substantiated</td>
</tr>
</tbody>
</table>

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 strategical 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 footprinting 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-detrimetal to the achievement of other SDG and sub-targets** [attention paid to interlinkages and tradeoffs]
In a 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.
The simplified version of your generic 2 phases approach split into 10 steps.

**Phase 1 – diagnosis**

**WHAT AND HOW**
1. Screen the material positive and negative SDG hotspots of your core business activities across your entire value chain (up until end-users, end-of-life products product or projects decommissioning)

**WHO**
2. Identify your stakeholders under 2030 Agenda main socio-economic categories

**WHERE & HOW NEEDED**
3. Map SDG achievement gaps and needs in the location where your organization has a strong foothold (assets, workforce, customer base) or where you plan a project, if possible upon specific stakeholder

**Phase 2 – contribution**

**WHAT OBJECTIVES**
4. Determine the ultimate benefits your organization or project expects to achieve

**HOW TO ACHIEVE THEM**
5. Identify the main features of the project considered or specific actions or programs to reach those objectives

**HOW TO GET THERE**
6. Be explicit as to the causal cascade between projects features, actions or programs and expected benefits: from input, activity, output, outcome and finally impact

**HOW TO FOLLOW THE EXECUTION**
7. Over the project or program’s lifetime, collect data to feed the KPIs and monitor distance to targets and trajectories, as well as anticipated and unanticipated negative externalities

**HOW TO DEMONSTRATE AND CLAIM**
8. Publish output and outcome results and shortlist external factors, broader socio-economic trends and actors influencing SDG gap progress status
9. Identify what SDG progresses would have happened anyway, without your intervention (imputability and additionality evaluation)

**HOW TO DO BETTER TOMORROW**
10. Feed the future: ways of improvement for ongoing SDG contribution optimizing

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

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

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).
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.

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.
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.

ASSESSING GREEN, SOCIAL OR SUSTAINABLE BONDS REPORTINGS UNDER THE LENSES OF THE SDGS

<table>
<thead>
<tr>
<th>II – SDG IMPACT OF THE USE OF PROCEEDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suitability for purpose</td>
</tr>
<tr>
<td>Relevance of the projects</td>
</tr>
<tr>
<td>SDG alignment or contribution approach</td>
</tr>
<tr>
<td>Within the reporting: Peer - The SDGs numbers and milestones 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’s a real theory of change and contribution (at organization, institution, or program level) that outlines the linkage from input, to activities, to output, to outcome, and ultimately to impact, linked to SDGs targets and is backed by KPI</td>
</tr>
<tr>
<td>KPIS, planning and trajectories for the intended contribution</td>
</tr>
<tr>
<td>Disclosure and management of the interlinkages</td>
</tr>
</tbody>
</table>

Snapshot of the Tool 8 (sub-category "SDG impact of the Use of Proceeds")
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)**

- Describe the eligible activities and their SDG footprint
- Level 0: Thematic
d- Level 1: Support your SDG contribution claim by mentioning the SDG’s relevant targets regarding your sector, industry, or project features
- Level 2: Match SDG targets to actual identified projects and their expected output
- Level 3: Demonstrate a real theory of contribution that outlines the linkages with your activities, their input, planned output, intended outcomes, and ultimately the impact contribution, linked to SDG targets

**Snapshot of the Tool 8 (section Reporting)**

- Identify baseline and measure used
- Level 0: There is no referencing of qualitative or quantitative data
- Level 1: Explicit reference indicates evaluation methodology, data providers or sources in the framework, no instance for normative analysis (SDG gain)
- Level 2: Additional, demonstrating (identify) costs of the SDG process that would have happened otherwise, without your intervention

**EXECUTIVE SUMMARY**
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-oekom-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.
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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