Description of
impak Methodology

May 2023

impak Analytics
Enabling sustainable change™

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1. Introduction

1.1 Context

Over the last few years, environmental and social issues have taken an increasingly important place in people's minds and the public is demanding solutions.

Until now, the industry standard in terms of responsible investing has been to look at opportunities through the ESG lens. This is no longer enough. Although ESG has been the gateway to push companies to understand their social responsibility, this type of analysis only takes into account the financial materiality of a company's activities, in other words, the impacts that are material to short, medium, and long-term company value. It lacks the consideration of stakeholders' materiality, or how the companies' activities impact stakeholders, such as people and the planet. In addition, ESG analysis only considers how companies mitigate the negative impacts of their activity, thus accepting that economic growth is a negative net contributor to social and environmental progress, rather than an opportunity to generate positive impacts.

To address the shortcomings of ESG, investors and companies alike have started to turn towards impact. Central to impact assessments is the concept of double materiality, which encourages entities to consider both the impact of sustainability topics on the company's value, and the entity's impact on the economy, the environment and the people. Through this approach, companies will need to identify and manage material sustainability topics accordingly. Impact assessments also look at investments from a holistic point of view, where positive outcomes are taken into account in addition to the mitigation of the negative ones. And this is the heart of the question: shouldn't companies be judged on the good they do in addition to how well they clean up the damage they cause, rather than just on the latter?

ESG and impact focus
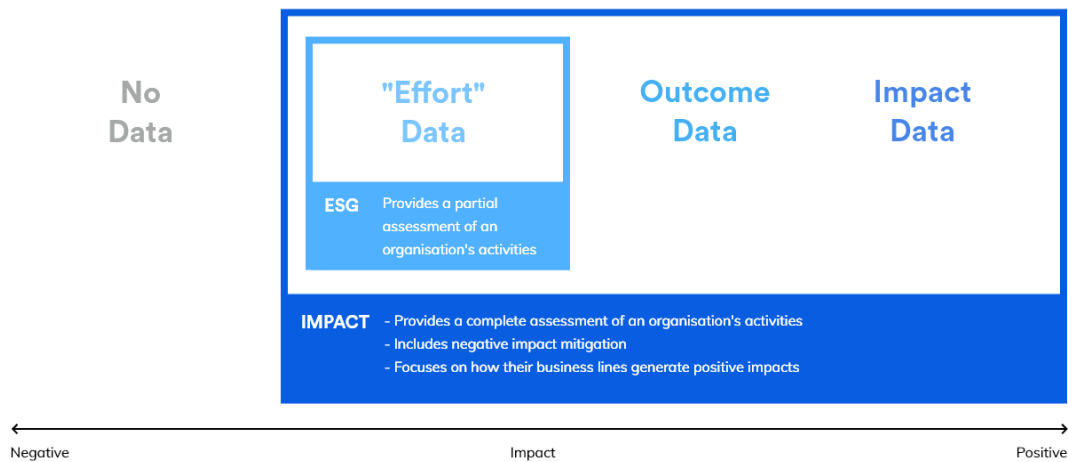
It is in this context that impak has developed its impak IS^2 solution and impak Score^{TM}. While building the methodology, we debated internally as to whether the output should be a rating, a summary of key indicators, a monetized valuation, a full impact analysis, or all of the above.

We concluded that ratings have key advantages such as that, when combined with transparency of the data, can be a very powerful tool for decision making. Impact analysis is complex and the industry standards which only look at outcome indicators are simply insufficient as part of this complexity is lost. Ratings, such as the impak Score^{TM}, can embrace that complexity as well as provide a holistic, AI-augmented tool backed by a human eye, to track the evolution of impact through time and most importantly benchmark investments.

However, like any valuation method, a rating is only as good as the data behind it, and it should be analysed in parallel with the underlying data and context, as some elements are harder to quantify. A third-party rating like the impak Score^{TM}, while having advantages such as being more holistic and objective, may not account for individual investor preferences. How to account for scale was another question that kept us up late at night.

We believe we have found preliminary answers and arguments to all of these questions, and we will share them with you throughout this document. That being said, this is only the beginning of our journey in an ever-changing industry, and we welcome all comments and feedback!

1.2 Key principles of our impact assessments

In building our impak Score^{TM} and impact statements, we have followed some core principles which are outlined below:

- <u>Complete and holistic approach</u>: assessing the full picture, which comprises positive and negative impacts;

- <u>Materiality</u>: putting the positive impacts in relation to total activities of a company (see section 3.1 on positive impacts) and selecting negative impacts based on a double materiality approach (see section 3.2 on negative impacts)). This helps us decrease the risk of overstating positive impacts and understating negative impacts;

- <u>Based on standards</u>: in order not to reinvent the wheel and instead increase the robustness of the analysis, we are aligned with a maximum number of recognized standards. Specifically, our methodology is based on the Impact Management Project's (IMP) framework and links to the UN's Sustainable Development Goals as the most commonly accepted typology of impact issues. We apply the IMP framework for the analysis of positive AND negative impacts in a holistic manner. Finally, by using the IMP's framework, we ensure that all stakeholder perspectives are taken into account, an issue that is close to our hearts.

- Objectivity: eliminating subjectivity of the analysis as much as possible, for example by systematically referring to international standards and consensus where relevant as mentioned above;

- Comparability: for a rating to truly be used as a catalyst for change, we believe its methodology should apply to all types of assets and asset classes (private or listed equity, for profits or nonprofits, projects, etc.). This enables investment professionals to have the full picture of the impact of their portfolio and compare it to benchmarks. To do this, we have essentially converted every absolute data point into relative data in order for it to be comparable, with the exception of Scale, as explained later in the document (see section on impak score);

- Transparency: by providing the raw data behind our ratings to subscribers and a high level of detail to the public, we are challenging the industry's status quo. Going forward, our goal is to increase the level of transparency further over time.

1.3 Universal Impact Assessments with a Score

impak IS^2 is an impact assessment solution designed for investment managers. It enables or allows for:

- The timely generation of impact assessments of investments and companies, accompanied by an impak score™ ;

- The tracking of businesses' impact over time. This creates an opportunity for dialogue with businesses that wish to improve their impact, year-on-year ;

- The presentation of information related to the impact of an investment portfolio through dashboards. This facilitates the transparent disclosure of impact performance.

1.4 Data collection

The Rating of a company on impak IS^2 is accomplished through an extensive data collection effort encompassing the review of documents published by the company itself as well as documents from other publicly available sources. All contextual and sectoral data is kept in our smart data base and managed by Subject Matter Experts.

In the case of private companies, data collection is accomplished through two online questionnaires that provide a structured exchange of information, therefore ensuring consistency and uniformity.

1.4.1 impak's questionnaires for private companies

For private companies, data is collected through 2 online questionnaires. For publicly listed companies, the questionnaires are used as a checklist and data is collected semi-automatically through company disclosures and alternative data sources.

The first questionnaire is a high-level overview of the impact that a company generates through its business activities and gathers basic company data such as its mission, outcomes, SDGs targeted, and percentage of activities linked to SDGs.

The second questionnaire is an in-depth review of a company's impact and gathers information such as output, outcome and impact indicators for positive and negative impacts, governance elements, etc. The outputs of the second step are the score and the impact balance sheet.

1.4.2 Process for private companies

The data available for privately-owned companies is declarative and often not audited. We have therefore developed a process to verify a significant part of the data provided by the company using external sources, document verification and interviews with the company.

1.4.3 Process for listed companies

For publicly listed companies this exercise is made somewhat easier by the fact that a lot of data is publicly available through external sources, and is often audited by external independent third parties. impak's analysts use a mix of company disclosures and external verified sources to collect data, cross-checking when possible.

2. Impact basis - What is impact?

Impact is a lasting change to the conditions surrounding people and the various ecosystems that constitute our planet. It can be positive and bring improvement to these conditions, or the opposite.

All economic activity generates negative externalities, whether environmental or social. Technically, all companies start from a situation of damage to the environment and potentially to society. However, they can implement activities to mitigate this impact, whether preventive or corrective, and minimize the harm it generates on people and the planet. Impact management consists in the identification, understanding and measure of these impacts and the implementation of a plan to not only reduce the negative impacts, but maximize the positive impacts. The best practice in the

industry is to qualify these impacts by relating them to one of the 17 United Nations Sustainable Development Goals (SDGs) and one of the associated targets.

The IMP, a global framework based on a global consensus on how to measure, assess and report impacts on people and the natural environment, goes further than traditional ESG ratings but is not in opposition to them. Quite the contrary, it includes the principles outlined by the Principles for Responsible Investment (PRI), Global Impact Investing Network (GIIN) and others and adds the assessment of positive impacts. The evolution it proposes is in line with what is needed from the financial world.

Also inherent to the IMP is the concept of intentionality, which is key when analyzing impact. Intentionality is not a separate dimension within the 5 IMP dimensions (See section 3.4 on the 5 Dimensions of the IMP below), but rather a transversal concept within the 5 dimensions and sub-criteria, such as the importance of outcome for stakeholders (were relevant stakeholders consulted and included in the company's decision-making) or the outcome threshold (did the company set targets considered ambitious enough to solve a particular issue or not). To add to this, we take intentionality into account through the weighting of each positive impact, which is calculated using the percentage of activities it represents within the companies' total activities (e.g. % of turnover). See section 3.1 on positive impacts.

3. IS2 Methodology

3.1 The selection of material positive impacts

There are many definitions of what is considered to be a positive impact, with the broader definition being the consideration of all long-term apparent effects of an intervention–intended and unintended. On the other hand, at impak, positive impacts are identified after an exhaustive review of the company's activities and intentionality. We select a maximum of 10 activities potentially generating a positive impact, and assess each activity based on four main categories to determine whether a positive change might occur, and whether the impact should be retained and analysed. Before assessing each of the steps, however, we need to consider whether the activity has already been delivered by the company during the year of analysis and if it is linked to its business model. If an activity has not yet been delivered or if it is related to an external initiative unrelated to the business model, we will not consider it as generating a positive impact.

Below is an overview of the four steps of assessment.

1. **Can the impact that the organization intends to generate be linked to a Sustainable Development Goal (SDG) and specific target?**

As mentioned above, our methodology is based on the IMP framework and links to the UN's Sustainable Development Goals as the most commonly accepted typology of impact issues. Therefore, the first step when assessing the relevance of an impact is to determine whether it can be linked to one of the SDG targets, and therefore contribute positively to one of the pressing issues that society needs to address, as defined by this framework.

2. **Does the activity go beyond impact mitigation, and generate a positive change?**

A positive change in the life of a beneficiary, let it be people or the planet, is not automatically synonymous with positive impact. Hence, the second step aims to analyze whether the impacts of the activity go beyond the mitigation of a negative impact of the organization to generate a positive impact for external stakeholders. The IMP identifies as a threshold the moment from which the stakeholders consider that the outcome is positive. Below this threshold, an activity that generates a positive change can only mitigate the negative impact of the organization. For example, take a company producing renewable energy from wind turbines. This step will determine whether the energy is produced for its own energy consumption (mitigation) or if it is generated for others - and therefore contribute to increasing the share of renewable energy in the global mix (positive impact).

Figure 1: The relationship between Break-Even Goals (bottom-left) and Positive Pursuits.

Positive impact

Direct impact / **Indirect impact**

Any business may
create positive impact itself
by taking action to foster wellbeing or restore the environment

Any business may
amplify the positive impact of others
by helping them take action to foster wellbeing or restore the environment

Every business must
eliminate its own negative impact
by avoiding all actions that undermine wellbeing or degrade the environment

Any business may
reduce the negative impact of others
by helping them avoid actions that undermine wellbeing or degrade the environment

Negative impact

3. Is the Theory of Change valid and recognized?

The Theory of Change (ToC) is a specific type of methodology for the planning, participation, and evaluation that is used in companies to promote social or environmental change. This process is fundamental in initiating impact transformation and should be part of any company's effort to generate true positive impact. The theory of change is embedded throughout the IMP framework and used by the analysts at impak to validate the logic behind the creation of impact.

It explains the process of change by outlining causal linkages within an initiative of an organization, i.e. its shorter-term, intermediate, and longer-term outcomes. The identified changes are mapped out – as the "outcomes pathway" – showing each outcome in logical relationship to all the others, as well as the chronological flow. The links between outcomes are explained by "rationales" or statements of why one outcome is thought to be a prerequisite for another.

INTERNAL PROCESSES | IMPACT CHAIN | EXTERNAL CONTEXT

MISSION
- What is the organisation's mission?
- Does it show vision, clarity and relevance?
- Is it in use, reviewed regularly, and embedded in the organisation's governance?

vision →

SOCIAL PURPOSE ORGANISATION

← *inform*

CONTEXT
- What is the problem and the current response?
- Who is being affected and what do they need?
- Who are the other stakeholders?

INVESTMENT CAPITAL

resources

INPUTS
- What are the inputs?
- What is the timeline of their availability and use?
- What is the relationship with the investment capital?

ACTIVITIES
- What are the activities and the timeline?
- How do the activities respond to beneficiary needs?
- Is the outreach of activities inclusive, especially of hard to reach beneficiaries?

MEASUREMENT SYSTEM
- Does the organisation show a strong commitment to being able to evidence the work it is doing, and the impact it is having?
- Is the measurement system fit for purpose, and capable of confirming the success or failure of the impact plan?
- Has the organisation selected a high quality set of indicators?
- Is there a plan and clear processes for data collection?
- Is there a review of the data collected?
- Are there specific and genuinely demanding targets and objectives in place?
- Is the measurement system proportional to the organisation?

monitor →

OUTPUTS
- What are the outputs?
- What is the timeline for their delivery?

articulate assumptions

CONDITIONS FOR CHANGE
- What are the assumptions implicit within the impact chain?
- What are the risks they present?

monitor →

OUTCOMES
- What are the outcomes?
- What is the timeline for their delivery?
- Have beneficiaries been consulted?

adjust for context of change

CONTEXT OF CHANGE
- What do the issues of deadweight, displacement, attribution, drop off and unintended consequences indicate about the observed change?
- Has an appropriate address of these issues been made?

MISSION FURTHERED
- How is the impact furthering the mission?

IMPACT
- What is the impact — the real change achieved by the organisation over and above the context of change?
- How does the impact relate to the original mission, and the problem it sought to address?
- What is the investor impact?

REAL CHANGE TO CONTEXT
- How is the impact contributing toward solving the original problem?

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4. Is the impact material, and what does it represent in terms of the company's activities?

If the percentage of activities that contribute to the selection of positive impact is <0.01%, we do not consider the impact to be material. In addition to the quantitative assessment of financial materiality, it is possible, as a second option, to assess the materiality of a positive activity through a qualitative assessment based on specific criteria. In order to limit the risk of overestimating a positive impact (impact-washing), if there is insufficient data to calculate or estimate a representative share, the activity is not retained as generating a positive impact.

If all of the four steps are met, the activity and related impact will be retained for the analysis. To note that activities not meeting all four steps will still be considered in the analysis, however, since the potential change cannot be confirmed, they will not be analysed according to the IMP framework and scored through the impak Score™.

3.1.1 Positive impact taxonomy

In order to facilitate the analysis of the four steps mentioned above, and to align the assessment of positive impacts with good sector practices, we have developed an impak positive impact taxonomy for the main sectors analyzed. Our taxonomy consolidates the best known and most robust sectoral consensus for qualifying positive impacts, notably based on the WHO, the European Taxonomy enabling activities, IRIS +, or the IEA. In this way, it gathers the conditions applicable to steps 1, 2 and 3 for the main positive impacts generated by a given sector. Therefore, if the activities of an organization correspond to an activity of the positive taxonomy, the applicable conditions will need to be validated by the analyst. To note that the taxonomies are not exhaustive, meaning that the analyst will still need to consider and assess other impacts that may be generated by the organization.

3.2 The selection of material negative impacts

As mentioned above, impact measurement requires a holistic analysis from the perspective of different stakeholder groups. A narrow focus may be detrimental to enhancing investor returns or achieving the SDGs goals. That is why materiality at impak is (1) double, (2) dynamic, and (3) context and data-driven.

3.2.1 Double materiality

Double articulates the two perspectives of materiality, stressing the impacts "on" and "of" a company. It identifies the risks and opportunities that the environment or society poses to a company, its development, performance and position, value creation (financial materiality), and its impacts on the economy, the environment, and the people (impact materiality). It is a question of understanding how the company, for instance, contributes to climate change ("inside-out" vision) and how the latter is a source of risk for the company ("outside-in" vision).

3.2.2 iMAT tool

impak launched an internal tool, the impak Materiality Assessment Tool (iMATool), to identify and prioritize material outcomes for a company across 173 sectors (based on the Industry

Classification Benchmark known as ICB). The tool assesses significant impacts of a company throughout its entire value chain with a life-cycle approach. For some organizations, their most important impacts may occur upstream or downstream in their value chain instead of within their own operations. The iMATool also offers a country and company-specific assessment as it is crucial to provide nuances as a sector-level result is essential but not sufficient to assess fully what is material for a company. Each material outcome is linked to an SDG and a target.

The iMATool is built on credible data to foster objectivity, robustness, and relevance, encompassing multiple **relevant international norms and standards**[1] and market-driven standards[2]. Notably, initiatives that link the SDGs to private companies' activities such as the Global Reporting Initiative (GRI), the United National Principles for Responsible Investment (UNPRI), the UN Global Compact, the Value Reporting Foundation (the VRF, formerly the Sustainability Accounting Standards Board or SASB)), and UNEP FI are used as the basis of the materiality assessment. Additionally, impak uses macro data at the company's sector and geographic level (academic, government, NGO sources) and includes controversies and controversial activities in the materiality process (see section 3.3 on controversies).

3.2.3 The impak Materiality Score (iMS)

In order to identify the most important outcomes, impak created the impak materiality score (iMS) and a threshold to better distinguish material outcomes from those that are non-material (less significant). The integration of this score into our materiality assessment allows us to be even more precise in targeting the issues most relevant to a sector and to better inform clients on the most pressing risks a company faces. This is the result of a two-year-long effort to bring together academic research and synthesize our expertise in impact and financial risk assessment into one common, actionable metric that is unique on the market.

The iMS is an aggregate score based on the financial and stakeholder materiality of negative outcomes from each ICB sector.

> **Stakeholder materiality score:** focuses on the external impacts generated by an organization's activities, including impacts on society and the environment. It is based on i) sector expertise value from impak's industy leads' knowledge, ii) hundreds of external

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[1] Including, but not limited to the Universal Declaration of Human Rights, the ILO Declaration on Fundamental Principles and Rights at Work, the European Convention on Human Rights, the European Social Charter, the Sustainable Development Goals (SDGs), the UN Guiding Principles on Business and Human Rights, The Ten Principles of the Global Compact of the United Nations, The OECD Guidelines for Multinational Enterprises, the Paris Agreement on Climate Change, the United Nations Framework Convention on Climate Change, the WHO Air Quality Guidelines for Europe.

[2] Including, but not limited to the International Finance Corporation: IFC Performance Standards, the World Benchmarking Alliance Social Transformation, the KnowTheChain benchmarks, Living wage financials, Encore Natural Capital, the Access to Medicine Foundation.
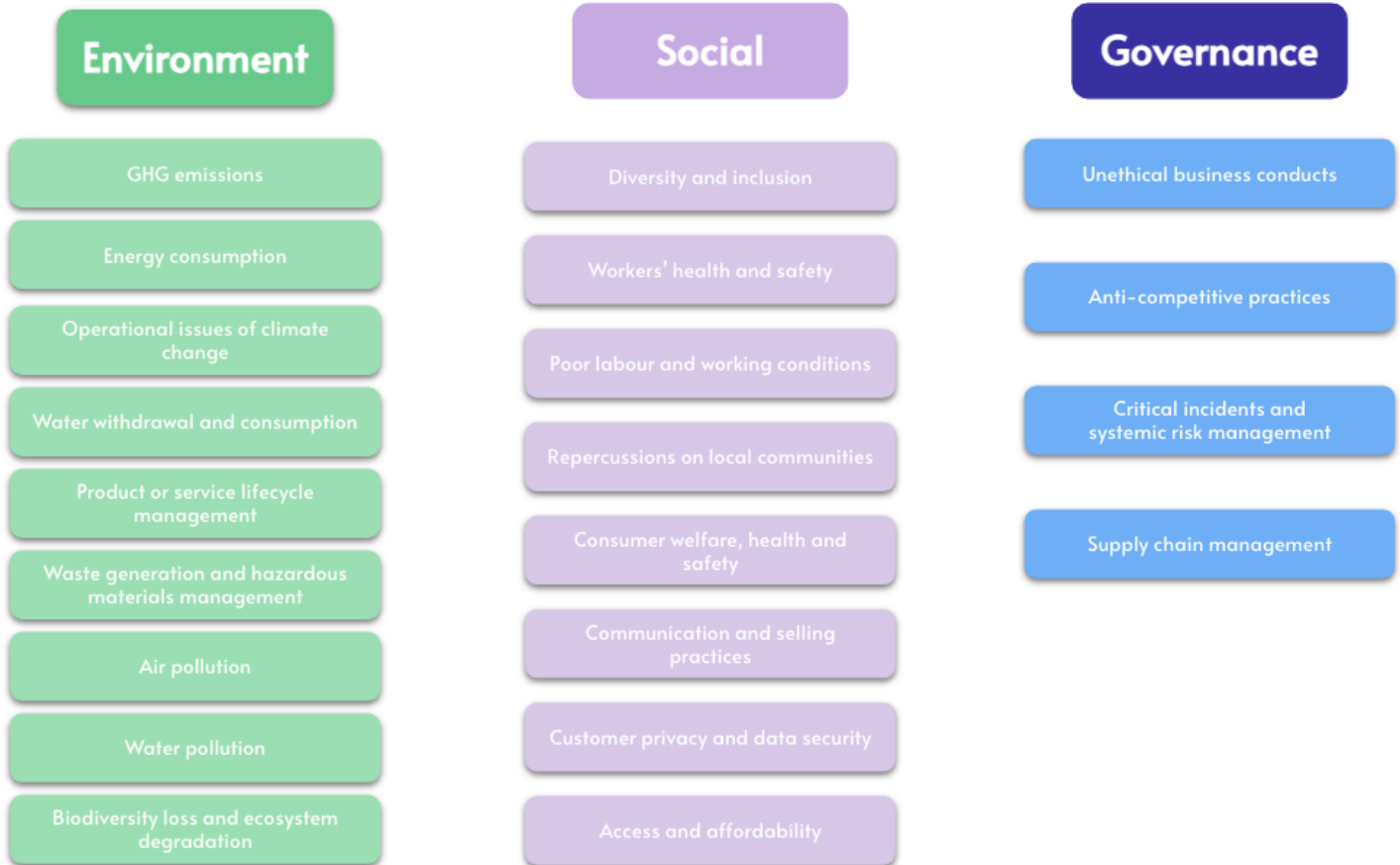
sources and databases such as the Science-Based Targets Network sector materiality tool, the European Union list of sectors that highly contribute to climate change, and Transparency International's Bribe Payers' Index, and iii) value drivers identified by the SASB Standards. While these value drivers are purely financial, some of them can constitute proxy measures to evaluate the risk of negative impacts for certain outcomes.

Financial materiality score: focuses on economic value-creation, external issues that internally impact a company's financial performance and its ability to create economic value for investors and shareholders. The financial materiality metric draws from work developed by Consolandi, Eccles, and Gabbi (2020). These authors published several papers aiming to assess the exposure of different sectors to various ESG factors. Using the value drivers dataset produced by SASB, they have developed the financial relevance indicator (FRI) to evaluate the level of financial relevance of any given sustainability risk for any given sector.

The iMS ranges from 0 (less material) to 4 (extremely material). Therefore, an impact will be considered "material" and retained for analysis if i) the iMS exceeds 2 and ii) the stakeholder materiality score exceeds 2.

3.2.4 Defined outcomes

The outcomes used in impak's analyses are derived from the Doughnut theory which defined an environmental ceiling with nine planetary boundaries, beyond which lie unacceptable environmental degradation and potential tipping points in Earth systems and twelve dimensions of the social foundation, derived from internationally agreed minimum social standards. The outcomes are also based on the 17 UN SDGs, while definitions are anchored in international definitions and standards, such as SASB, the GRI, UNEP FI, the WBA, the OECD guidelines and more. The twenty outcomes, divided intro Environmental, Social, and Governance categories, are shown below:

Environment	Social	Governance
GHG emissions	Diversity and inclusion	Unethical business conducts
Energy consumption	Workers' health and safety	Anti-competitive practices
Operational issues of climate change	Poor labour and working conditions	Critical incidents and systemic risk management
Water withdrawal and consumption	Repercussions on local communities	Supply chain management
Product or service lifecycle management	Consumer welfare, health and safety	
Waste generation and hazardous materials management	Communication and selling practices	
Air pollution	Customer privacy and data security	
Water pollution	Access and affordability	
Biodiversity loss and ecosystem degradation		

3.2.5 Actual and potential impacts

A negative impact occurs when an action removes or reduces the stakeholders' ability to meet the needs of the present without compromising the ability of future generations to meet their own needs. Two types of negative impacts exist:

- Actual: an impact that has already occurred or is occurring (in progress)
- Potential: an impact that may occur but has not yet done so

This distinction between actual and potential is at the heart of numerous standards, regulations and initiatives such as the OECD Guidelines for Multinational Enterprises and the UN Guiding Principles on Business and Human Rights (UNGPs) [3]. Following this trend, impak considers both

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[3] Notably, the OECD Guidelines for Multinational Enterprises and the UN Guiding Principles on Business and Human Rights (UNGPs), the future European Directive on Corporate Due Diligence and Corporat Accountability, the European Sustainable Finance Disclosure Regulation (SFDR) and the European Financial Reporting Advisory Group's (EFFRAG).

types of impacts in its analyses. Once the materiality has been assessed for the company with the iMATool, and material outcomes have been retained, the analyst determines whether the outcomes are actual or potential negative impacts. An outcome linked to a material controversy is analyzed as actual (see the following section).

To note that the impak Score^{TM} is calculated for actual impacts only (see p.28).

3.3 Media watch and controversies

Companies can operate in controversial activity sectors, regions or contexts (controversial activities) and can be in the middle of social or environmental controversies and litigation (controversial events).

➔ **Controversial events:** Scandals, allegations, fines and convictions will also impact the materiality assessment and can affect the impact type of each material impact and of the organization globally

To assess the materiality of controversial events in the impact assessment, impak developed a controversy monitoring methodology used by a dedicated team (the Media Watch team). This research team is responsible for the continuous monitoring of news related to companies in the impak universe, to find out if they are involved in any event which may impact the analysis, and in the end, allow us to better inform our clients about their investment choices on a real time basis.

We use different research platforms and search streams to ensure continuous monitoring done both periodically throughout the year and before starting an analysis. While the periodic monitoring is done automatically (push) through an alert system, the initial controversy monitoring is a thorough (pull) research done by the Media Watch team aiming at identifying any material events that will later be treated through the controversy score. Through this process, impak is searching for convictions, allegations, NGO reports, appeals, settlements, etc. that can inform us on the companies' specific ESG impacts, as well as their ability to properly mitigate their material negative impacts and/or generate positive impacts in regards to the SDGs.

The Media Watch team filters the research results to retain the most material controversies from an impact perspective using the controversy score. The construction of this score, inspired by the IMP framework and especially the stakeholder's vulnerability principle, is based on eight impact criteria. Three criteria are the core element of the score namely, the duration, scale and, irremediability, and the other criteria as multipliers which decrease or increase the overall score depending on the answer modalities selected. The core criteria represent 5 points of the score out of 12.9. The other criteria are acting as multipliers, and the score is then normalized to a scale of 10.

Similar to the impak Score^{TM} construction, the team used an empirical approach to set weights to the algorithm, and 3 testing steps with 5, 15 then 100 controversies.

3.3.1 The controversy score

Below is the high level formula for impak's controversy score, which was developed internally in consultation with our independent expert committee.
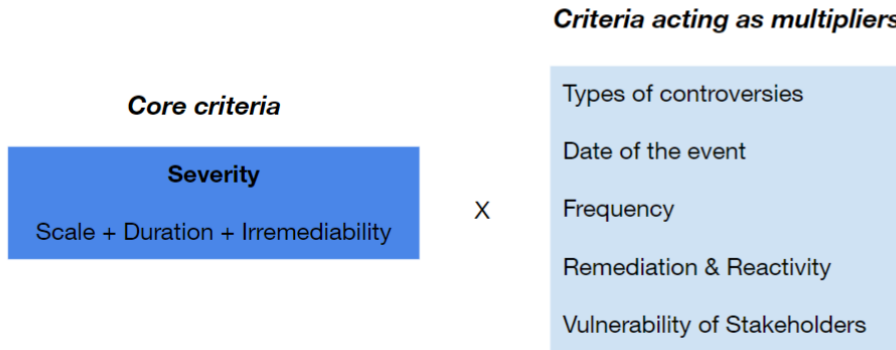
The following table details the different criteria.

Date of the event	Frequency	Types	Vulnerability of stakeholders	Duration	Scale / Geog boundary	Irremediability	Remediation & Reactivity
Year of the analysis or ongoing	3+	Conviction	Entire population	]3+ years	Widespread	Yes	Company has not acknowledged the allegation/event
]Year of analysis - 3 years]	2	Self-declared culpability	Major part of the population	]2-3] years	Extensive	Partially	Company has responded publicly to the allegation/event
Between]3- 5] years	1	Conviction appealed	Minor part of the population	]1-2] years	Localized	No	Company has policies in place related to the allegation to prevent the type of alleged impact from reoccurring
Between]5- 10[years	0	Formal allegation	No vulnerable population involved	]0-1] year			Company has taken appropriate action to address the alleged impacts in consultation with stakeholders
[10 years +		Legal action settlement, **etc.**		One-Time event			

The score of a controversy is associated with a level of severity, from low to severe. Controversies with a low level of severity are not retained in the impact assessment.

Severe	The impact of the controversy is mostly widespread or extensive, with severe repercussions on stakeholders. At least a major part of the population is considered vulnerable, and the company management practices are considered unsatisfying and/or there are no appropriate measures in consultation with stakeholders have been taken.
High	The impact of the controversy is mostly extensive or widespread with high repercussions on stakeholders. Vulnerable stakeholders are involved and the company management practices are considered unsatisfying. For events with severe repercussions on stakeholders, the company has taken appropriate measures in consultation with stakeholders.
Moderate	The impact of the controversy can be localized to widespread, but involves some vulnerable stakeholders. The impact is mostly moderate with no irremediable repercussions. For events with high repercussions on stakeholders, the company has taken appropriate measures in consultation with stakeholders.
Low	The impact of the controversy is mostly localized or extensive with no irremediable repercussions on stakeholders. There is no vulnerable population involved and/or the company has taken appropriate measures in consultation with stakeholders to mitigate the impact appropriately.

This process is done upstream from the impact assessment to identify additional material impacts. It enables the analysts to provide an assessment that is actual and context-driven.

3.4   The 5 Dimensions of the IMP

Once the positive and negative outcomes have been assessed, the impact analysis of organizations is carried out along the 5 dimensions of the IMP:

- ▪ WHAT: what outcome(s) an impact relates to and how important the outcome is to the people (or the planet) experiencing it.

- ▪ HOW MUCH: how significant an impact is in a given time period. How deep is it? How many people are affected? How long does it last and how quickly does it occur?

- ▪ WHO: who experiences an impact and how underserved they are in relation to the outcome.

- ▪ CONTRIBUTION: how the effect compares and makes a contribution to what is likely to happen in the broader market, had the company not taken part in it.

- ▪ RISK: which risk factors are significant and how likely is it that the outcome differs from the expectation.

Impact performance is assessed and reported across the following categories of data:

Dimension	Category	Description
WHAT	1. Outcome in Period	The outcome experienced by the stakeholder when engaging with the enterprise.
	2. Importance of outcome to stakeholder	Stakeholders' view of whether the outcome they experience is important. Where possible, the people experiencing the outcome provide this data, e.g. through direct surveying, although third party research may also be included. For the planet and environment, scientific research provides this view.
	3. Threshold for positive outcome	The level of outcome that is considered to be positive/ good enough. Anything below this level is considered negative/not good enough.
	4. SDG and SDG target	The Sustainable Development Goal that the outcome relates to, along with the specific target.
WHO	5. Stakeholder	The type of stakeholder experiencing the outcome.
	6. Geography	The geographical location where the stakeholder experiences the outcome.
	7. Baseline	The level of outcome experienced by the stakeholders prior to engaging with, or otherwise being affected by, the organization.
	8. Stakeholder characteristics	Socio-demographics and/or behavioural characteristics and/or ecosystem characteristics of the stakeholder to enable segmentation during the intervention.
HOW MUCH	9. Scale	The number of individuals experiencing the outcome. When the planet is the stakeholder, this category is not relevant.
	10. Depth	The degree of change experienced by the stakeholder. Depth is calculated by analyzing the change that has occured between the 'Baseline' (WHO) and the 'Outcome in Period' (WHAT).
	11. Duration	The time period for which the stakeholder experiences the outcome.
CONTRIBUTION	12. Depth	The estimated degree of change that the stakeholder is likely to experience in the market without (or "irrespective") of the company's contribution to the outcome.
	13. Duration	The estimated time period that the outcome would have lasted for anyway - without engaging with, or being affected by, the enterprise.
RISK	14. Type of risk	Impact risk is the likelihood that impact will be different than expected, and that

		the difference will be material from the perspective of the people or the planet who experience impact.
		1. **Evidence Risk**: the probability that insufficient high-quality data exists to know what impact is occurring (or will occur) across the other four dimensions of impact, for all stakeholders.
		2. **External Risk**: the probability that external factors disrupt the organization's ability to deliver the expected impact.
		3. **Stakeholder Participation Risk**: the probability that expectations and/or experience of stakeholders are misunderstood or not taken into account.
		4. **Drop-off Risk**: the probability that the expected positive impact does not endure and/or that negative impact is no longer mitigated.
		5. **Efficiency Risk**: the probability that the expected impact could have been achieved with fewer resources or at a lower cost.
		6. **Execution Risk**: the probabilities that the activities are not delivered as planned or do not result in the desired outcomes.
		7. **Alignment Risk**: the probability that impact is not locked into the enterprise model, making mission drift more likely.
		8. **Endurance Risk**: the probability that the required activities are not delivered for a long enough period.
		9. **Unexpected Impact Risk**: the probability that unexpected positive or negative impact is experienced by people and the planet.
		*For the purpose of our analysis, we analyze the 4 most material risks per outcome.
	15. Level of risk	The level of risk, factoring in the severity and likelihood of the impact risk. There are three levels of risk: low, medium, and high.
	16. Risk reduction strategies	Concrete action steps to mitigate the risks identified in the previous two categories.

3.5   ZABC Impact types

The IMP proposes a simple categorization scheme for the impact of businesses, which overcomes the confusion created by the many methodologies to describe and measure impact.

Classification of impact Types, Impact Management Project

A – Act to avoid harm: at a minimum, investors who wish to follow an impact model can choose enterprises that act to avoid harm to their stakeholders, for example decreasing their carbon footprint or paying an appropriate wage; such 'responsible' enterprises can also mitigate reputational or operational risk (often referred to as ESG risk management), as well as respecting the personal values of their asset owners.

B – Benefit stakeholders: in addition to acting to avoid harm, investors can also favour enterprises that actively benefit stakeholders, for example, through proactively upskilling their employees, or selling products that support good health or educational outcomes; an increasing

range of these 'sustainable' enterprises are doing so in pursuit of financial outperformance over the long term (often referred to as pursuing ESG opportunities).

C – Contribute to solutions: investors can go a step further, by investing in companies that are using their full capabilities to contribute to solutions to pressing social or environmental problems, such as enabling an otherwise underserved population to achieve good health or educational outcomes or hiring and upskilling individuals who were formerly unemployed for a prolonged period.

Z – Does or may cause harm: enterprises that do not mitigate their material negative impacts in a significant manner or for whom a material controversy has been identified (see section 3.5.1 on Z below).

Each impact has a rating: a positive impact will therefore be B or C, a negative impact Z or A. These ratings lead to the overall rating of the company: according to the principle of Z prevails, the presence of a Z cancels the other notes.

This classification can be applied at a portfolio level as well. There are three steps to determine the category of a portfolio:

1. For each individual impact within a business, analysis along the WHAT, WHO, HOW MUCH, CONTRIBUTION and RISK dimensions will determine its category (A, B, C or Z).

2. For each business within a portfolio, the amalgamation of all impact levels measured in (1) and their relative importance will determine the portfolio's level of classification

3. For each portfolio, the amalgamation of the impact levels for all businesses measured (2) and their relative importance, as well as the fund impact strategy will determine its level of classification.

Classifying an enterprise's impacts into A, B or C

Dimension	Assessment to look for...				
☐ What	Unknown	Important negative outcomes	Important negative outcome(s)	Important positive outcome(s)	Important positive outcome(s)
◯ Who	Unknown	Various	Underserved	Various	Underserved
☰ How Much					
Depth	Unknown	Various	High degree of positive change	Various	High degree of positive change and/or
Scale	Unknown	Various	Various	Various	For many and
Duration	Unknown	Various	Various	Various	Long-term
+ Contribution	Unknown	Various	Likely the same or better	Likely the same or better	Likely better
△ Risk	Unknown	Various	Various	Various	Various
	↓	↓	↓	↓	↓
Classification of impact	May cause harm	Does cause harm	Act to avoid harm	Benefit stakeholders	Contribute to solutions

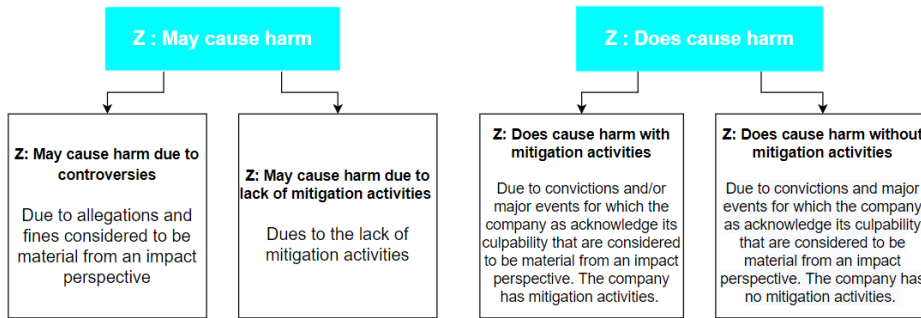Source: Impact Management Project

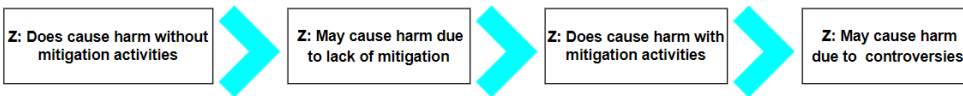### 3.5.1 Impact type Z: May and Does cause harm

In 2021, impak has improved how it attributes a Z and its consequences on the score. Several situations can lead to a Z.

The first and most important criteria is a lack of mitigation. If a company has a negative impact identified as material by the impak Materiality Assessment Tool (iMATool) (see section 3.2 on negative impacts) and further materiality analysis, but does not report effective mitigation activities, the impact will be considered as Z or "may cause harm".

A second situation is if a controversy is deemed sufficiently severe by the impak controversy score (see section 3.3.1). Depending on the nature of the controversy (legal actions having more weight than allegations for instance) the conclusion can be Z May or Does cause harm. Several criteria can increase the weight of a Z, such as the vulnerability of stakeholders or the repetition in the past. See the four types of Z and their level of severity below.

Z : May cause harm		Z : Does cause harm	
Z: May cause harm due to controversies Due to allegations and fines considered to be material from an impact perspective	**Z: May cause harm due to lack of mitigation activities** Dues to the lack of mitigation activities	**Z: Does cause harm with mitigation activities** Due to convictions and/or major events for which the company as acknowledge its culpability that are considered to be material from an impact perspective. The company has mitigation activities.	**Z: Does cause harm without mitigation activities** Due to convictions and major events for which the company as acknowledge its culpability that are considered to be material from an impact perspective. The company has no mitigation activities.

The hierachy of Z

Z: Does cause harm without mitigation activities	➤	Z: May cause harm due to lack of mitigation	➤	Z: Does cause harm with mitigation activities	➤	Z: May cause harm due to controversies

A Z conclusion has consequences on a company's score. It cancels the points the company may have gained for the mitigation of this specific negative impact and, depending on its severity, can reduce the points the company may have gained through positive impacts. See section on the **impak Score™** below.

4.   impak IS^2 - an overview

4.1   Building the impact statement

The impact statement, an analogy to financial statements, is the compilation of all the data resulting from the impact analysis of the company. It contains several sections.

4.1.1   Summary

The Summary provides a qualitative description of the analysis. It includes information about the company: its sector, products and services sold, geographies, and market position. It also provides information about its governance structure, most material negative impacts, as well as key mitigation strategies and positive impacts. Finally, it gives information about the impak Score™ and the A, B, C or Z impact type.

	Reporting year:	2020 ⇕	PDF Expor

TotalEnergies

Extraction of crude petroleum and natural gas, Manufacture of chemicals and chemical products, Manufacture of coke and refined petroleum products

More Info

Summary

impak Score™

Introduction
TotalEnergies is a French oil and gas and electricity company whose mission is to "provide more affordable, more accessible and cleaner energy to as many people as possible." With its exploration and production, refining and chemicals, gas, power and marketing and services business lines, TotalEnergies generated in 2020 140,685 million euro revenue. TotalEnergies has a major position in France and in European financial markets as it is the first company in the CAC 40 index and the second in the Euro Stoxx 50. Operating in more than 130 countries, it employs 105,476 employees and is among the world's ten largest integrated oil and gas producers.

impak Score™
170

More Info

Impact type

Z	May cause harm

More Info

Governance
TotalEnergies's mission is not included in its governance documents. However, the CEO's bonus compensation has since 2019 included a performance-based condition to reduce GHG emissions, which represents 10 % of its base salary.
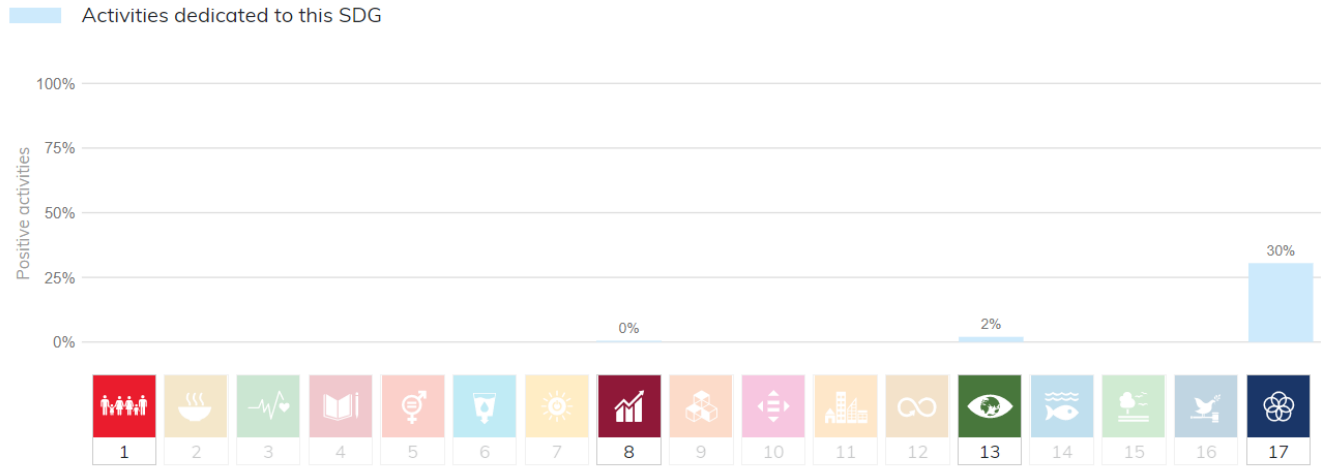
Negative impacts

The impak Score™ and Impact Type provide a cursory evaluation of the impact of the company and are built on the detailed analysis. The following sections will provide more details.
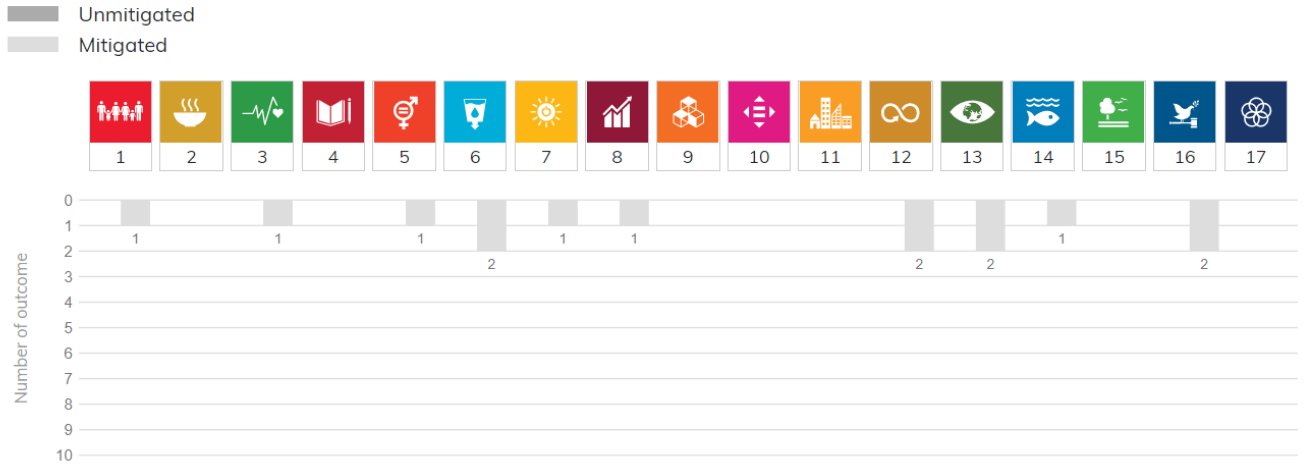
4.1.2 SDG alignment and Negative impact mitigation

Provides an overview of the positive impacts alignment with SDG as well as the negative impacts mitigation and related SDG.

SDG alignment

Negative impact mitigation

4.1.3 Positive impacts in the business model

This matrix paints a picture of where the main activities generating impact sit within the global scope of the company. It provides information on the relative importance of these activities in the total activities (e.g. turnover, OpEx, CapEx, etc.) and helps in interpreting the true importance of impact in the mission of the company.

Positive impacts in the business model

Business lines	Medium voltage	Low voltage	Secure power	Industrial Automation	Part of activities %
Training disadvantaged people to find electricity related jobs					0.011%
Support entrepreneurs to undertake energy-related business					0.011%
EcoStruxure: IoT-enabled open and interoperable system architecture and platform	✔	✔	✔	✔	30%
EcoStruxure: IoT-enabled open and interoperable system architecture and platform	✔	✔	✔	✔	30%
Total turnover %	17%	45%	14%	24%	

i.

4.1.4 Positive impacts

Retained positive impacts

This section provides information about retained positive impacts, or those that have passed the four steps (see section 3.1 on positive impacts). In the overview, we can see the description of the activity generating the positive impact, the percentage of activity as per Group revenue, the related SDG and outcome, as well as affected stakeholders and impact type (B or C).

Activity	Part of activities addressing SDG	SDG	Outcome	Stakeholders	Impact type
Providing sustainable energy solutions to customers through the manufacturing and installation of wind turbines	100%	7 AFFORDABLE AND CLEAN ENERGY	Facilitation of the transition from fossil fuel energy to renewable energy	- Local ecosystems - Citizens - National governments - Utility companies, power plant/energy developers, and independent power providers (ipp) for community and national, on-grid solutions.	B

By expanding, a full assessment of the impact based on the 5 dimensions of the IMP is available.

☐ **What**	More Info	◯ **Who**	More Info
1. Outcome in period	17055MW Total capacity of produced and shipped wind turbines in 2020 129GW Total delivered capacity globally (cumulative) in 2020	5. Stakeholders	- Local ecosystems - Citizens - National governments - Utility companies, power plant/energy developers, and independent power providers (ipp) for community and national, on-grid solutions.
2. Importance of the outcome to stakeholder	High		
		6. Geographical boundary	No information
3. Outcome threshold	No information		
		7. Baseline	12618MW Total capacity of produced and shipped wind turbines in 2019
3.1 Company objective	No information		
			113GW Total delivered capacity globally (cumulative) in 2019
4. SDG	7 Affordable and clean energy		
		8. Stakeholder characteristics	No information
4.1 SDG Target	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix		

How much		Contribution	
	More Info		More Info
9. Scale	5239 Total number of produced and shipped wind turbines in 2020	12. Depth	No information
	186000000tCO2eq Annual CO2e avoided by the total aggregated installed fleet in 2020	13. Duration	No information
10. Depth	35.0 % Evolution total capacity of produced and shipped wind turbines From 2019 to 2020		
	14.0 % Evolution total delivered capacity globally (cumulative) From 2019 to 2020		
11. Duration	Long duration: more than one year		

Risk			
			More Info
14.1 Evidence risk	Low: Vestas provides precise and detailed qualitative information, as well as key outcome indicators which allow assessing the impact and evolution. Indicators are audited and reporting methodology is disclosed.	14.6 Execution risk	Non material
		14.7 Alignment risk	Low: Although Vestas is a for-profit company, the outcome generation is locked into the company's business model and governance practices.
14.2 External risk	Non material		
		14.8 Endurance risk	Non material
14.3 Stakeholder participation risk	Low: Ongoing stakeholder engagement process through customer loyalty surveys and life cycle assessments, to ensure that their needs are fully considered for this impact.	14.9 Unexpected risk	Non material
14.4 Drop off risk	Low: Vestas ensures that the benefits of the wind turbines and wind farm are sustained through service contracts for maintenances, repairs, and fleet optimization of the installations.		
14.5 Efficiency risk	Non material		

Considered positive impacts

This section provides information about the considered positive impacts, or those that have not met the four selection steps described above. Similarly, it provides information on the activity and

the related SDG and outcome it would align with. It also provides information on which step was met and which was not, in addition to a justification of why it was not retained.

Activity	SDG	Outcome	Criteria	Criteria justification(s)
- Producing and distributing electricity from renewables: wind, solar and hydroelectric assets with subsidiaries Total Quadran, Total Eren, Total Solar International, Total Solar Distributed Generation and Sun Power	7 AFFORDABLE AND CLEAN ENERGY	Increase in the use and production of renewable energy in the energy mix	✓ Delivered activity ✓ Linked to SDG target ✓ Validated Theory of Change ✓ Reached threshold ✗ Reached financial materiality	Considered as positive impact, but not financially material (% of activities <0.01%)

4.1.5 Negative impacts

This section provides information about the material negative impacts retained in the analysis. It is divided into two sections: Actual material negative impacts and Potential material negative impacts.

More specifically, it provides information on the activities generating the negative impact, the associated mitigation activities implemented by the organization, the related SDG and outcome, as well as information on whether the company has acknowledged the outcome or not. Finally, it provides information on the affected stakeholders and impact type (A or Z).

Activity generating negative impact	Activity mitigating negative impact	SDG	Outcome	Company acknowledgement	Stakeholders	Impact type
- Contributing to gender inequalities through under-representation of women, especially in executive and managerial positions, and the gender pay gap - Contributing to racial inequity through the under-representation of ethnic minorities in the total workforce, executive team, and board of directors	- Implementing the second agreement on professional and pay equality embedding thematics including parenthood, flexible working hours options, hirings and career development - Developing initiatives to encourage women development opportunities through training and mentoring campaigns - Implementing procedures to address pay inequalities, including conducting pay equity reviews and correcting gendered pay inequities	10 REDUCED INEQUALITIES	Diversity and inclusion	Yes	- Civil society - Local communities - Vulnerable groups - Women employees	A

4.1.6 Impact Results

These sections show the KPIs and objectives that have been reported by the company, in relation to the impact area and the associated SDG. It also contains a brief description of the KPI as well as the reporting period and a progression bar showing evolution towards implemented objectives (if any). Impact results are presented for both positive and negative impacts.

SDG	Outcomes covered	Total indicators	^
13 CLIMATE ACTION	1	6	

Associated outcome	Indicator	Progression towards threshold or objective
Greenhouse gas emissions	Direct (Scope 1) GHG emissions	142,149 tCO2eq (-20.96 %) ▭
		179,834 tCO2eq ▭ N/A
Greenhouse gas emissions	Energy indirect (Scope 2) GHG emissions	145,207 tCO2eq (-43.4 %) ▭
		256,542 tCO2eq ▭ N/A
Greenhouse gas emissions	Other indirect (Scope 3) GHG emissions	65,701,766 tCO2eq (-2.54 %) ▭
		67,413,029 tCO2eq ▭ 43,818,469 tCO2eq ▭

5. impak Score^{TM} Explained

5.1 Introduction

The impak Score™ complements the quantitative and qualitative analysis of the impact of an organisation. It ranges from 0 to 1,000 and it rates the capacity of an organisation to generate positive impacts and mitigate its material negative impacts at time t.

Being well aware that a single rating cannot sum up or replace a multifactorial impact analysis, we developed our score to summarize the complexity of our analyses and give an overview of the impact-related criteria that are comparable between organisations. It is therefore not exhaustive by design and should always be examined in parallel with a full quantitative and qualitative impact analysis (the impak Balance Sheet). Specifically, impact metrics (such as tons of GHG emissions reduction or number of beneficiaries) are not included in the calculation of the score (only their evolution is), since those metrics are rarely comparable from one organization to another.

The score is applicable to any autonomous organisation with its own governance body (private or listed entities, for profits or nonprofits, projects, etc.). It allows a greater level of comparability when coupled with the detailed analysis of the most consensual cross-sector impact criteria, based on the Impact Management Project's framework.

The impak Score™ is unique in the market and enables the ranking of companies based on their impact, as well as allows for objective-setting and tracking. It summarizes the context behind the numbers, which is so key in impact analysis. As such, one dollar invested in a company with a comparatively higher score will have more chances of producing a positive impact than one dollar invested in a company with a comparatively lower score.

5.2 Methodology and Criteria

The score is mainly based on the Impact Management Project framework and the A, B, C classification of impact, C being the most advanced type of impact organisation, with the highest performance both in mitigating its negative impact and generating positive outcomes. The more an organisation performs similarly to a C-type company for each selected criterion, the more points it gets.

Impact type

Z — Does/may cause harm	A — Act to avoid harm	B — Benefit stakeholders	C — Contribute to solutions
Have a significant effect on negative outcome(s) for underserved people and the planet	Prevent or reduce significant effects on important negative outcomes for people and the planet	Have various effects on important positive outcomes for people and the planet	Have a significant effect on positive outcome(s) for underserved people and the planet
"We are not responsible for global warming"	"We have regulatory requirements to meet (e.g. we have to cut our carbon emissions)" "We want to mitigate risk" "We want to behave responsibly"	"We want to have a positive effect on the world to sustain long-term financial performance" "We want a world where all businesses try to have a positive effect on society"	"We want to help tackle malnutrition in Africa" "We want to help tackle the education gap"

0 pts   impak Score™   1000 pts

Impact types in accordance with Impact Management Project

In other words, the closer an organisation's impak Score™ is to 1,000 points, the more likely it is to be a C-type company.

Sample question:

> - Q. Is the mission clearly identified (1), does it include targeted stakeholders (2), an environmental or social issue (3), and a solution to such issue(s) (4)?

1. Yes to all four criteria (impact mission is complete)
2. Clearly identified mission but incomplete
3. Clearly identified mission only (not an impact mission)
4. No mission

Option 1 would score the most points as it is closer to a C-type company, followed by option 2 and 3, option 4 scoring the least.

Because a score represents a level of performance, it is not possible to compare all impact criteria. For example, a business "X" that has 10 beneficiaries in London does not necessarily perform

better or worse than business "Y" in Nepal that has 1,000 beneficiaries. Thus, the impact score does not consider descriptive (such as geographic location, SDG targeted, type of beneficiary) and non-comparable criteria (such as scale and depth of impact) as comparing these descriptive and quantitative criteria would only make sense when analyzing companies within the limits of each sub-criteria. This explains why the impak Score™ is a complementary data point to the detailed analysis of all other relevant impact criteria.

We have assigned questions such as the one above and their corresponding weights to each IMP sub-criteria listed in the table on p. 8 in order to calculate a total impak score, as explained below.

5.2.1 What

This category assesses the outcome, its importance, its priority in the business model and its alignment with an SDG. To do so, several key data points are collected:

- The percentage of the activities which contributes to a positive outcome, and in turn to an SDG (we use % of revenues, Opex or Assets depending on the impact strategy);

- The importance of the chosen outcomes, defined as the level of importance according to the stakeholders in the targeted positive outcomes or the materiality of negative outcomes;

- The soundness of the business model in delivering short-term outcomes, and whether it is built into the organization's strategic plan to achieve targeted long-term SDGs.

Sample question:

▪   Q. What is the percentage of the activities positively contributing to an SDG?

5.2.2 Who

This category presents data points regarding the beneficiaries of the impact, those experiencing an improvement of their situation (positive outcome) or a deterioration of their situation (negative outcome):

- The level of vulnerability of the beneficiaries reached for each outcome;

- The extent to which the needs of the beneficiaries had been addressed before the organization's action (baseline).

Sample questions:

▪   Q. What part of the stakeholders is identified as having a higher level of vulnerability?

1. The entire population of stakeholders experiencing the positive outcome is vulnerable (including if the stakeholder is the planet)

2. A major part of the population of stakeholders experiencing the positive outcome is vulnerable

3. A minor part of the population of stakeholders experiencing the positive outcome is vulnerable

4. There is no known vulnerability in the targeted population

5.2.3 How much

This category presents data points regarding the commitment of the organisation towards achieving results and its capacity to improve them over time:

- The capacity to improve the outcomes results over time;

- Whether the objectives are set against a referenced threshold;

- The capacity to attain those objectives;

- The duration of the outcomes.

Sample question:

- Q. What is the evolution of the outcome compared to its threshold?

1. Above: performance reaches or exceeds threshold

2. Below: positive evolution, on track to reach threshold

3. Below: positive evolution, but not on track to reach threshold

4. Below: no evolution of performance

5. Below: negative evolution, not on track to reach threshold

5.2.4 Contribution

This category presents data points regarding the relative contribution of an organisation to the achievement of outcomes and their durations (contribution to depth and duration) thanks to:

- Innovation positioning;

- Affordability and accessibility efforts;

- Level of competition on impact.

Sample question:

- Q. How does the positive outcome generated by the organization's activities compare to the depth of the outcome that the rest of the market or other service providers would otherwise deliver (i.e. a counterfactual scenario)?

1. Probably bigger depth of positive outcome compared to counterfactual

2. Probably same depth of positive outcome compared to counterfactual

3. Unknown depth of positive outcome compared to counterfactual

5.2.5 Risk

This category rates the capacity of an organisation to manage internal or external factors influencing the positive impact generation - or the initiatives in place to mitigate its negative impact through:

- Impact understanding and focus: capacity to understand and adapt to beneficiaries' context and needs (stakeholder participation risk, unexpected impact risk, drop-off risk, external risk);

- Processes and operations: capacity to ensure delivery of planned impact related activities (efficiency risk, endurance risk, execution risk);

- Measurement of impact results and response: capacity to ensure correct accountability and measurement of generated impact (evidence risk, drop-off risk, external risk);

- Impact governance and culture: capacity to ensure impact alignment and continuity (alignment risk).

Sample question:

- Q. To what extent has the organization demonstrated the causality of its positive outcome?

2. Able to prove causality between activity and positive outcome generation, supported by a complete measure validated by experts and the organization is able to replicate this outcome

3. Complete theoretical and logical explanation on how the positive outcome is generated and supported by a complete measure (outcome/output)

4. Partial theoretical and logical explanation on how the positive outcome is generated

5. Partial theoretical and logical explanation on how the positive outcome is generated but only supported by output measures

6. Partial theoretical and logical explanation on how the positive outcome is generated, but not supported by any measurement

7. Nothing is evidenced

5.3 The impak database

The following tables present the breakdown of the maximum impak Score™ per sub-score (Table 1), along with the number of data points used to calculate each sub-score (Table 2). Each potential answer to the sample questions provided in the previous chapter is considered a data point.

Table 1: Score by category of questions

Category of questions	Maximum score
Positive impacts	500
Negative impacts	300
Governance	200
Total	1,000

The impak Score™ is currently calculated based on a maximum of 307 data points from a total of 3,854 data points collected through impak's data collection process. We use the word maximum because most questions are repeated throughout the positive and negative impacts identified, as the score is then averaged as explained below. For a company with 5 positive and 10 negative outcomes, the total number of actual data points that influence the score would therefore be higher than for a company with 1 positive and 1 negative impact. However, we prefer to refer to the maximum number of data points for simplicity.

If an organization omits a particular piece of information in its disclosures, no points will be given to the related data point in the score.

The 307 data points used to calculate the impak Score™ were handpicked by our impact experts as being (i) the most relevant to explain impact, (ii) comparable between companies, sectors and asset classes and (iii) realistically relatively easy to obtain. We chose to limit ourselves to this

number to calculate the score out of the nearly 4,000 data points collected per Issuer keeping in mind the best practices in econometry (the more variables in a model the less significant each becomes), while balancing with a minimum number of data points to ensure statistical relevance.

Below is an overview of the impak database. As explained in the *Selection of Impacts section*, we limit the number of positive impacts to a maximum of 10 and negative impacts to a maximum of 20. Therefore, for one particular question, the maximum number of data points is 10 if it is a positive impact question and 20 if it is a negative impact question. Governance questions, on the other hand, apply to the entire organization and are not influenced by the number of positive or negative impacts; therefore, we account for only 1 data point per question. Additionally, the overview is split between raw data (pure data collection) and data derived from active analysis of the organization (e.g. an analyst, based on raw data and a framework, has come to the conclusion that the evidence risk is high for Issuer X).

Table 2: Overview of the impak database

Data Points	Description		Max # of data points for impact statement	Max # of data points for score calculation
Company Information & top metrics	Name, sector, ISIN code, key financial data, mission, etc.	Data collection	38	5
	Score (+ 3 sub-scores), Impact Type, Summary, Custom Indicators (up to 5).	Data derived from analysis	11	
Positive impacts (up to 10)	All data collected on activities leading to the generation of positive impacts relative to the 15 subcategories of the IMP referenced on p. 8, including output and outcome metrics, level of evidence indicators and sources	Data collection	957	113
		Data derived from analysis	310	
Negative impacts (up to 20)	All data collected on activities mitigating the negative impacts relative to the 15 subcategories of the IMP, including output and outcome metrics, level of evidence indicators and sources.	Data collection	1,900	166
		Data derived from analysis	610	
Governance	Data on the integration of impact within strategies, enterprise culture and governance structures.	Data collection	17	23
		Data derived from analysis	11	
Total # of data points			3,854	307

5.4 impak Score™ Calculation

5.4.1 General formula

The algorithm calculates a positive impact score for each positive outcome (up to 10) and negative outcome mitigation (up to 20) identified as well as a general, company-wide governance score by summing up the weights associated to each data point in each category.

The following formula is then applied:

$$impak\ score_i = \sum_{i=1}^{n} \%\ of\ activities_i * positive\ impact\ score_i + \frac{1}{n} \sum_{i=1}^{n} negative\ impact\ score_i + governance\ score$$

Where :

- $n = the\ number\ of\ material\ positive\ or\ negative\ impacts$
- $positive\ impact\ score_i = the\ individual\ positive\ impact\ scores(up\ to\ 5)$
- $negative\ impact\ score_i = the\ individual\ negative\ impact\ scores(up\ to\ 10)$
- $governance\ score = the\ company - wide\ governance\ score$
- $\%\ of\ activities = the\ percentage\ of\ activities\ contributing\ positively\ to\ an\ SDG$

One important condition is built into the algorithm as well as detailed in the following sections and summarized here: if a company has been assigned a Z for one of its negative impacts, the total company positive impact score will be discounted according to the rules detailed below, and the associated negative impact score will be brought to 0.

5.4.2 Positive Impacts

The positive impact score is calculated based on each positive outcome identified by the company and verified by the analysts.

As explained above, the "positive impact" scores represent the extent to which a business model is in line with the SDGs and the capacity to generate positive impact, and not whether this positive impact has actually been generated or not, as this is often too complex to measure.

Each individual positive impact score is then weighted by the percentage of activities (e.g. turnover, OpEx, CapEx) it represents. This way, we can adjust for over-reporting of positive outcomes by companies, when the positive outcomes represent a rather small portion of their overall activities. C companies whose business model is to generate positive impact will always keep an advantage on B companies.

All weighted individual positive impact scores are then summed up to calculate a global positive impact score.

In line with the principle of materiality and for practical reasons, any positive contribution to an SDG that was estimated to represent less than 0.01% of the company's total activities will not be included in the rating process.

As described above, we have also developed a taxonomy to map products and services and draw links between them and the SDGs, as well as a set of rules and algorithms to estimate % of activities linked to SDGs depending on the sector and the data available. If a % of activities cannot be estimated reliably, the related positive impact will not be taken into account.

Depending on the strategy used to generate the positive impacts, several methods are used to estimate the % of activities. For instance, for CSR activities, we estimate the total CSR budget and compare it to total Operational Expenses (OpEx). For the financial industry, we use a percentage of assets rather than turnover, among other methods.. For private companies, we base ourselves on the information provided by the company in their financial statements and other relevant data they produce.

5.4.3 Negative impacts

The negative impact score is calculated per material negative impact identified by the analysts based on generally accepted materiality frameworks.

The "negative impact" scores are positive numbers and represent the company's ability to reduce or mitigate its most significant negative impacts. In other words, companies will get points for how well they manage and mitigate their negative impacts.

Individual negative impact scores are not weighted, but all individual scores are averaged out using an arithmetic average to calculate a global negative impact score.

If an organization does not address one of its material negative impacts in a significant enough manner, that impact will be rated as a Z as per the IMP methodology (does or may cause harm). As such, the company will be penalized and its impak Score™ will be negatively impacted. This is in line with the impact theory and the IMP methodology and is used to avoid companies marketing their positive impacts while material negative impacts go unaddressed (e.g. a company that exploits children, for instance, should not be able to score points on positive impacts).

A Z rating will affect a company's score in two ways:

  i.   The negative impact score of the specific negative impact for which a Z was concluded will be brought to 0; and
  ii.   The whole company's positive impact score will be decreased by a factor as described below:

Given that there is today no consensus or standards on how to classify different levels of harm (e.g. everyone agrees that institutional modern slavery is probably worse than a single isolated case of bribery, but what about institutional bribery vs banks' interest-rate fixing?), we've decided to base the level of penalty in case of a Z on 3 different factors:

- **The type of Z (does or may cause harm):**
  - A company will be rated Z (does cause harm) if the company was found guilty, was fined, or recognized guilt;
  - A company will be rated Z (may cause harm) if it does nothing to mitigate or gives no information regarding a particular material negative impact.

- **Repetition of the Z throughout time**: how often did the company score a Z on this specific outcome in the past 3 years. and

- Only in case of a Z (does cause harm), we also look at whether or not **corrective action** has been taken: what did the company do after the indictment, e.g. organise the clean-up of a contaminated area or put a long-term mitigation strategy in place.

Depending on the situation, the algorithm will then penalize the company through the application of a correction to its positive impact score. In the case of a single Z (may cause harm) during the year of analysis, the positive impact score will be decreased by 20% for example. In the case of a Z (does cause harm) that was repeated during the past 3 years and for which no corrective actions were put in place, the positive impact score will be decreased by 100%.

5.4.4 Governance

On top of positive or negative impact related questions, the rating also takes into account governance questions.

The "governance" score represents the company's ability to ensure impact alignment and continuity, as well as an assessment of the level of controversy around a company's activity. The governance score is split into 3 categories:

- **Intentionality** (77 pts out of 200): is the company mission clearly identified, does it address an environmental and social issue and a solution to these issues; how is it formalized in governance documents; level of integration of impact analysis in the value chain; etc.

- **Impact integration** (45 pts out of 200): presence of impact experts in the workforce; composition of the board; presence of impact/CSR objectives in KPIs and compensation goals; use of impact indicators to improve processes, analysis; initiatives to drive impact culture; etc.

- **Sector and controversies** (78 pts out of 200): an assessment of the level of controversy around a company's activity.

  o As of today, there is no global consensus on what constitutes a controversial activity since what is considered controversial is relatively subjective, and directly linked to cultural values, religions and changes through time. To establish our own list of controversial industries, we have tried to avoid bias by taking into account different definitions of controversy based on several sources, including our main competitors' methodology, when available. We have also studied exclusion lists from SRI funds, international organizations' recommendations and scientific articles from recognized universities and experts. However, this list is bound to evolve as we include direct expert consultation in the future and more stakeholder's consultation.

  o We also recognize that a company may have a positive impact on an SDG even when involved in a highly controversial business. An alcohol producer could have programs in place (even if not directly linked to its activity) that create positive impacts, for example, an organic beer company which employs people from disadvantaged backgrounds for professional reintegration.

  o The different levels of controversy are therefore defined as objectively as possible, analyzing:

    ▪ whether the activity is considered as a negative contributor to SDGs (high controversy; eg tobacco, alcohol, weapons);

    ▪ whether the activity is mostly considered as a negative contributor to SDGs but may still have a positive contribution to SDGs (medium controversy, e.g. fossil fuel, nuclear energy, pornography, gambling); or

    ▪ whether the activity is mostly considered as a potential positive contributor to SDGs but may still have a negative contribution to SDGs (low controversy; e.g. consumer goods, financial services).

The scores for these questions are simply added up to form a total governance score.

5.4.5 Setting the Weights and Building the Algorithm

To build the algorithm leading to the score (the dependant variable), we started with outlining the guiding principles as well as the explanatory criteria (the independent variables) as explained

above (the score data points, based on the IMP), and set out to discover the model from there in 3 steps:

- A learning step based on a limited sample of 5 companies representative of the complete spectrum of impact, selected by our internal experts. Thanks to an empirical analysis, our experts attributed a score to each company in the sample and ran a solver to minimize the sum of the square distances between the score set by the experts and the result of the algorithm. We also kept in mind the distribution of the data points per dimension so as to keep somewhat of a correlation between the importance of the dimension (in terms of maximum score) to the number of data points within it, to ensure that no one single question's weight was excessive. This resulted in weights assigned to each data point and category of data points that constituted the first version of the model.
- A testing step to verify the model obtained at the learning step. The testing step was performed on a larger sample of 15 companies and allowed us to test the precision and the robustness of the model and adjust it according to the results;
- A validation step on a third sample of 100 companies to confirm the relevance and the accuracy of the formula.

At each step, the results were cross-checked with expectations from our experts as to where each company should fall within the spectrum according to the underlying data.

Additionally, questions were added, deleted or modified throughout this process as our data set grew to continuously improve the methodology.

This is the operational model that we are using today. We are currently working on a fourth version, and as we continue to build our data set, we will continuously improve and adjust the model.

5.4.6 Other comments

The score has been built to reflect the fact that positive impacts cannot offset negative impacts. This is why there is no negative sign in front of the negative score, for instance, and why we decided, instead, to give points for how well an organization manages its negative impacts.

The score was also built to be able to compare and benchmark companies with each other. To this end, we chose only to include criteria that are comparable within industries and between companies. This leads to a score that includes less criteria than, for example, an ESG rating, and could therefore be thought of as less precise, especially on the negative impact side. However, the chosen data points were carefully chosen to allow for a fair and robust evaluation of an organizations' positive and negative impact.

A typical example of something that is impossible to compare are impact indicators, when deprived of their context, either when indicators are different in nature, but even when they are the same. For example, comparing "Quantity of GHG emissions" to "Employment satisfaction" does not make sense. Comparing two indicators on "Employment satisfaction" could also be

problematic in very different circumstances (different service, different level of need, etc.) in the absence of any context.

We therefore chose to present the impact indicators separately in our company impact statement and include only the evolution of such indicators in the score. The company will therefore score points if the indicators are evolving positively.

5.5 Interpretation and limitations

It is clear that impak Score™ does not represent any concrete number such as dollars or number of beneficiaries. It should be viewed as a means to rank companies and compare them to each other.

From an investment perspective, one should think of the score as follows to compare potential investments to each other: for each $ invested in the capital of a company, one will increase its chances of contributing to a positive impact by investing in a company with a high score than in a company with a low score.

The impak Score™ therefore does not constitute a guarantee of creating a positive or decreasing a negative impact.

Finally, it is important to repeat that the impak Score™, indicators and impact matrix act as an "impact balance sheet", meaning they are a snapshot of a company's situation at a specific point in time. Therefore, they do not include any forward-looking initiatives that might be implemented in the future. As will be mentioned in the next section, we are exploring the possibility of building a forward-looking score to account for this.

5.6 The Future of the impak Score™

The impak Score™ is a first in the market. The market will become more sophisticated in time and our data set will inevitably grow. As a result, issuers will increase their level of impact reporting and henceforth, we will gather from customers and companies and continuously improve our scoring system, keeping in mind the need for consistency (changes to the methodology will be published and incidence on individual ratings will be brought to the attention of clients and issuers).

Potential avenues for improvement include:

- exploring a better way of accounting for the size of a company and scale in the score without making it impossible to benchmark;
- implementing a prospective score for projects or future investments;
- complementing the score with other data points such as level of transparency of the company or confidence intervals to account for the level of verification of the data;

- and increasing the transparency of the methodology behind the score's calculation.

One of our main objectives is to further analyse the correlation between impact performance and financial performance, as well as further exploring the notion of a portfolio impact efficient frontier similar to the portfolio efficient frontier concept in modern portfolio theory.

To ensure we stay up to date on the latest in impact assessment and rating methodologies, we will organise roundtables and brainstorming sessions with experts in the field to support and accompany us in this process. Our independent methodology committee is also set to review the algorithm every 2 years.