Impact measurement in the financial sector

Measure what matters

Banking for Impact

June 2022
About Banking for Impact

Our global economy remains stalled at a critical juncture. Well-known social and environmental threats have been ignored in favour of a short-sighted economic system. The negative side effects are piling up – runaway climate change, natural resource depletion, increasing inequality, diminishing social safety nets and a widening gap between the rich and poor.

The remedy is a more inclusive market economy, one that serves people and the planet, not just shareholders. To help get there, the Banking for Impact working group aims to create a common impact measurement and valuation approach tailored to banks. This will provide banks with the tools necessary for a broader view of their value creation and a better understanding of their impact on society, empowering them to use this information to report and manage impact. Towards this end, we are working on a robust, scalable and cost-effective method for the quantification, valuation, attribution and aggregation of impacts for the sector. The goal is to scale-up and standardise these efforts over time, with support from the financial industry.

Banking for Impact (BFI) has laid out its vision for measuring what matters in a vision paper available on the Banking for Impact website.

Interested in joining the Banking for Impact working group? Please reach out to Sven Renon.
## Versioning

<table>
<thead>
<tr>
<th>Version Number</th>
<th>Date</th>
<th>Updates since previous version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draft 0.1</td>
<td>27/09/2021</td>
<td>Implemented feedback from working group. This included:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Expanded on Impact measurement and valuation (IMV) in introduction and highlighted benefits to banks.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Expanded on rationale and strategic position of banks in introduction, added reference to vision paper.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Checked alignment of principles outlined in this document with the Impact-Weighted Accounts Framework (IWAF), adapted the style to match this document.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Made the figures regarding the structure of this document and the documents in this methodology series more circular.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Completed case studies and where possible, made sure they cover all key elements of the relevant section.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Introduced links to Supplement 1 for resources such as a standard list of direct and indirect impacts.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Added links to additional resources and tools in relevant chapters.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Added examples and visuals to attribution section to make it less technical. Also added link to Greenhouse Gas (GHG) protocol.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Elaborated on qualitative assessment.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Adapted definition of an indirect impact to make it more intuitive.</td>
</tr>
<tr>
<td>Draft 0.2</td>
<td>21/10/2021</td>
<td>• Made small formatting and grammar updates</td>
</tr>
<tr>
<td>Draft 0.3</td>
<td>12/11/2021</td>
<td>• Implemented feedback from observers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Implemented suggested changes from proof-reader</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Updated layout (margins)</td>
</tr>
<tr>
<td>Draft 0.4</td>
<td>14/12/2021</td>
<td>• Correction of errors and clarification of phrases and concepts</td>
</tr>
<tr>
<td>Draft 0.5</td>
<td>28/01/2021</td>
<td>• Implementation of feedback from consultation period</td>
</tr>
<tr>
<td>Draft 0.6</td>
<td>10/05/2022</td>
<td>• Added catchier a subtitle</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Added a sentence in introduction welcoming readers to join the BFI</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Included a user’s guide in the introduction detailing aspects on governance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Added alignment with other IMV initiatives in introduction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Elaborated further on the differences between ESG and IMV</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Added IWAF principles that were considered relevant for impact measurement, aligned content and principle names</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Added a section on the importance of understanding the context of the impact assessment in the Frame chapter</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Expanded to include a “more information” box</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Added a glossary to shortly explain key concepts</td>
</tr>
</tbody>
</table>
Table of Contents

About Banking for Impact..............................................................................................................2
List of abbreviations.....................................................................................................................5
1 Introduction................................................................................................................................6
  1.1 Rationale and motivation........................................................................................................6
  1.2 About this document..............................................................................................................6
  1.3 Reader’s guide...................................................................................................................7
  1.4 User’s guide.......................................................................................................................9
2 Impact........................................................................................................................................11
3 Impact measurement and valuation.........................................................................................14
4 Principles for impact measurement..........................................................................................16
  4.1 Principles............................................................................................................................16
5 Stages of impact assessment.....................................................................................................20
6 Frame........................................................................................................................................21
  6.1 Step 2: Define the objectives................................................................................................21
7 Scope.........................................................................................................................................23
  7.1 Step 2: Choose organisational focus....................................................................................24
  7.2 Step 3: Scope the impact assessment of the products and services..................................27
  7.3 Step 4: Select impacts for further analysis.........................................................................36
8 Impact measurement and valuation..........................................................................................42
  8.1 Step 5: Define impact pathways..........................................................................................43
  8.2 Step 6: Quantify impact.......................................................................................................44
  8.3 Step 7: Value impact............................................................................................................56
  8.4 Step 8: Attribute and aggregate impact.............................................................................59
Glossary.........................................................................................................................................67
List of abbreviations

BFI  
Banking for Impact  

BOM  
Brabantse Ontwikkelings Maatschappij  

B2B  
Business-to-business  

B2C  
Business-to-consumer  

ECB  
European Central Bank  

ESG  
Environmental, Social, and Governance  

ESS  
Employee satisfaction score  

GHG Protocol  
Greenhouse Gas Protocol  

GiD  
Global Impact Database  

GiIN  
Global Impact Investing Network  

IAM  
Integrated Profit and Loss Assessment Methodology  

IMV  
Impact measurement and valuation  

IP&L  
Integrated Profit and Loss  

IWA  
Impact Weighted Accounts  

IWAF  
Impact Weighted Account Framework  

LCA  
Life-cycle assessment  

NDPE  
No-Deforestation, No Peat and No Exploitation  

OECD  
Organisation for Economic Cooperation and Development  

PRB  
Principles for Responsible Banking  

RCT  
Randomized control trial  

SMEs  
Small and medium-sized enterprises  

SROI  
Social Return on Investment  

UN  
United Nations  

UNEP FI  
United Nations Environment Programme Finance Initiative
1 Introduction

1.1 Rationale and motivation

The world currently faces a myriad of challenges. We are a long way from achieving a decent standard of living for everyone and are putting enormous pressure on our planet’s resources, driving crises like the loss of biodiversity and climate change.

While all organisations influence the world, from the way they treat employees to the way they serve their customers, banks have influence that extends far beyond their walls. As facilitators of financial capital across sectors, they can direct funds into organisations that benefit society as well as influence others to change and create more sustainable business models.

Sustainable business models facilitate tomorrow’s successes. If a firm has a clear understanding of its impact on all stakeholders, that firm can position itself strategically for the transition to a more sustainable economy. Banks will benefit from taking this into account when making financing decisions; there is growing evidence that impact measurement translates into financial returns.\(^1\)

On the flip side, not accurately measuring and reporting on impact poses risks to banks. Bad press around environmental and social issues can damage a bank’s reputation and credibility. Social and environmental impacts are increasingly materialising on balance sheets, resulting in severe consequences, from dependency on natural resource accessibility to vulnerability in the face of new regulations. Impact measurement and reporting is a way to future-proof banks in the face of environmental and social challenges.

It is therefore imperative that banks not only understand their influence and the current status of their impact but increasingly start to use their influence to enact positive change. For more detail on benefits of impact measurement to banks, please consult Scaling up impact measurement and management for banks, a vision paper published by the Banking for Impact (BFI) working group.

BFI and the BFI methodology aims to give banks the practical and analytical tools to do just this.

1.2 About this document

This document, Impact measurement in the financial sector, aims to guide banks to start measuring their impact. This document focuses on the specifics of impact measurement, including impact definitions, guiding principles of impact measurement, and the steps and stages involved in the process.

---

\(^1\) An increasing amount of research shows that focusing on positive impact correlates with better and less volatile performance: Harvard Business School (2014) found that firms in the high sustainability group outperformed those in the low sustainability group. McKinsey (2019) found that a strong ESG proposition correlated with higher equity returns.
This document is written for anyone working within a bank who would like to start measuring the impact of their bank or of a specific product, business line or single portfolio.

While this document can provide insights to all banks, its guidance is focused on retail, commercial and corporate banking as well as asset management. Guidance tailored specifically to pension funds or specific investment banking areas, such as mergers and acquisitions, will be explored in future versions.

This document gives guidance on impact measurement. It will, however, be difficult to perform a total impact assessment using this document alone. This guide forms an overview of the necessary steps and inputs, but additional training and resources will likely be necessary to perform a full impact assessment.

This document should be understood and used together with the other materials by BFI, see figure 1 below. In particular, Supplement 1 supports this document and should be used alongside.

**Figure 1. Overview of core and supporting documents in the Impact methodology series**

The methodology described in this document builds on well-established knowledge and frameworks, in particular the Impact-Weighted Accounts Framework, a framework developed in partnership with the Impact-Weighted Accounts Initiative from Harvard Business School, the Singapore Management University, Rotterdam School of Management and Impact Institute. An extended list of informative references can be found in the Conceptual Framework for Impact-Weighted Accounts.

The document extends these existing frameworks and initiatives by tailoring the guidance specifically for banks.

### 1.3 Reader’s guide

For readability, this document uses some simplifying terms:

- “The bank” is used to describe any financial institution.
- “The impact of your bank” is used to describe the set of all impacts of your bank.
In this document, several examples and real-world challenges are given to show the applicability of the method. These can be identified by their position in various coloured boxes:

**Fictional example**

This illustrative example shows how to apply the method by using a hypothetical bank called Fides Bank. This case study runs throughout the document and illustrates the steps and stages. This example is indicated by a grey box.

**Real case study**

This example shows the case where real banks/organisations have applied the methodology. These examples are indicated by green boxes and include links to reports where more information can be found.

**Practical challenges**

In addition to the case studies, this document also identifies practical challenges faced by banks when doing impact measurement. These challenges are indicated by yellow boxes.

**More information**

Here more information is provided on a key concept or methodology step.

**Additional resources**

Additional or helpful resources, relevant to each chapter, are also provided in the document. The resources listed in these boxes do not represent a complete list and more will be added in future versions.

In some steps of impact measurement for your bank, it is often required to consult key stakeholders. This document also provides information on which stakeholders to consult. It is indicated by ‼️ Consult at the end of each chapter.
This document can be read as a standalone but will regularly refer to the other BFI documents, in particular Supplement 1. The Conceptual Framework for Impact-Weighted Accounts should also be consulted for a more detailed explanation of key concepts and definitions.

1.4 User’s guide

This document outlines the stages, steps and activities required to perform an impact assessment (Chapters 6-8). For the user of this guide, it is important to keep in mind important actions to take before starting the impact assessment. These include setting up a core project team that will be responsible for carrying out the main part of the assessment, as well as a clear division of roles and responsibilities.

Typically the following teams and roles can be defined:

- **Steering committee**: Sign off on the final results, and are consulted or informed of key decisions throughout.
- **Working group**: Responsible for the execution of the project, including defining the scope, gathering data and performing calculations. The team often includes at least two roles; a project lead responsible for the process and realisation of milestones, and a content analyst who can perform calculations and gather the necessary data. Depending on the size of the project these roles can be further divided. In addition to resources from within the organisation, external consultants can be involved to assist the impact assessment. This can be especially helpful if resources within the organisation are limited.
- **Validation team**: To ensure good quality results a validation process is key. This is ideally performed by an individual outside of the core working group, so that they can produce independent findings.
- **Consulted stakeholders**: Aside from the core working group, other stakeholders may be valuable to consult. These can include content advisors, legal representative and topic or sector experts. Gathering input from a range of stakeholders helps to ensure that the concepts of impact measurement are widely understood and that support is garnered from numerous people within the company. Comprising the project team of representatives from different departments including finance, legal, reporting, sustainability, risk and procurement, can help gain support in the organisation.

Throughout the project, several key decisions must be agreed upon. An overview of roles and responsibilities (e.g. a RACI matrix) can be a useful tool for assigning roles and responsibility for each decision or action. In the following table the key decisions for a standard impact assessment are listed. A useful starting point for any project is to determine who should be responsible, accountable, informed or consulted on these key decisions. This RACI matrix will likely differ between organisations and projects and is therefore left blank in this example.
<table>
<thead>
<tr>
<th>Stage</th>
<th>Key decisions</th>
<th>Responsible</th>
<th>Accountable</th>
<th>Informed</th>
<th>Consulted</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Frame</strong></td>
<td>What is the objective of the assessment?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Scope</strong></td>
<td>What activities are in scope?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Which stakeholders are considered?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>What reference scenario is being considered?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Which impacts are in scope?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Impact measurement</strong></td>
<td>Impact measurement approach per impact</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Choice of data sources</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Valuation approach and factors (e.g. monetization)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Choice of attribution factors</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Level of aggregation for final results</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2 Impact

Impact can be understood as the difference an individual or entity makes in the world by having an effect on the things valued in society\(^2\). There are three key elements to this definition:

1. Impact is about the *effects* and not the *intentions* of the actions of an individual or organisation\(^4\).
   
   This means that impact is about measuring outcomes, rather than inputs or outputs, addressing the way that people or the planet is affected.

2. Impact is about having effects on things that matter\(^5\).
   
   From an impact perspective, an effect is only relevant if it affects something of value, such as health, reducing suffering or freedom, whether directly or indirectly. This also means impact necessarily has a subjective component, as people in society can value these things differently. The degree to which these things are valued can be made explicit through valuation.

3. Impact is about making a difference\(^6\).
   
   This means that the question of *what would have happened* had an activity not taken place (or had an organisation not have been active) becomes central. Counterfactual (‘what if’) thinking is important, and, to do this, a reference scenario is used. Here, the **reference scenario** is the set of activities and related outcomes that is assumed to happen in the absence of the organisation. Impacts reflect the difference in outcomes between the actual scenario (with the organisation) and the reference scenario.

Impact can be assessed in both backward-looking and forward-looking manners; it can be **positive** or **negative**, **intended** or **unintended**, **direct** or **indirect** (from the perspective of the organisation in scope) and it can be **absolute** or **marginal**.


\(^3\) This definition comes from a more technical interpretation “Impact is a change in a valuable and measurable outcome that affects the welfare of an organisation’s stakeholder with respect to a reference scenario during a given timeframe.” More information on this section can be found in the Conceptual Framework for Impact-Weighted Accounts

\(^4\) This refers to the definition outlined above that impact is a change in a valuable and measurable outcome.

\(^5\) This refers to the definition outlined above that impact is about the outcome that affects the welfare of an organisation’s stakeholder.

\(^6\) This refers to the definition outlined above that impact is about the change (with respect to a reference scenario during a given timeframe).
Some other impact definitions:

- **Positive impact** refers to a positive change of a capital stock, or a positive change in the well-being of a stakeholder or prevention of the breach of a right (as compared to the reference scenario).

- **Negative impact** refers to a negative change of a capital stock, a negative change in the well-being of a stakeholder or the breach of a right (as compared to the reference scenario).

- **Intended impact** is the impact that an organisation purposefully makes through their activities.

- **Unintended impact** is the impact that an organisation does not purposefully make through their activities, but that arises as a side effect of the activities. Unintended impact can be assessed by making use of impact pathways.

- **A direct impact of an organisation** is an impact caused directly by the organisation’s own operations.

- **An indirect impact of an organisation** arises outside the organisation, where the organisation’s activities exert an influence on a pathway or system which influences the occurrence or size of the impact.
  - Indirect impact can be generated within the value chain (**value chain impact**) or the system (**system impact**). Value chain impact refers to the impact generated within the organisation’s value chain, and system impact refers to the impact generated outside the organisation’s value chain.

- **Direct and indirect impact** can be the responsibilities of different players within the organisation’s value chain. Hence, a factor should be applied here which attributes the impact accordingly to the organisation and each player in the value chain, based on its responsibility. This is called **attribution** and will be discussed later in **Chapter 8** of this document.

- **An absolute impact** is the impact generated by an organisation’s activities as compared to a no-alternative reference scenario in which no activities occur.

- **A marginal impact** is the additional impact generated by the organisation’s activities as compared to a scenario where alternative activities continue in the organisation’s absence.

3. For a more detailed explanation of the definition of impact and for further examples, please consult the [Conceptual Framework for Impact-Weighted Accounts](#).

4. **BFI Document – Supplement 1** provides a standardised list of impacts that are relevant for banks and financial institutions in general. When assessing a specific product/service of your bank, additional impacts can be added depending on the operations of the activity/product/service of your bank (and the associated outcomes).
When assessing an impact, a consistent methodology to define and measure (or project) impact is through an impact pathway. An **impact pathway** is a quantifiable chain of effects and counterfactual effects linking a specific activity of a company to its impact. The building blocks of the impact pathway are shown in Figure 2. These are: (realised or projected) activity, reference activity, input, output, outcome and impact.

The impact pathway shows how an organisation’s activities, inputs and outputs lead to outcomes and then to impacts. Other impacts are mainly associated with the use of inputs by the organisation. For a more detailed explanation of the definition of impact and examples, please consult the Conceptual Framework for Impact-Weighted Accounts. The example of the application of the impact pathway can be found in Chapter 7.

**Figure 2.** Impact pathway

Input(s) are the financial, human, manufactured, natural and other resources used in the activities of the organisation. The **activity** includes the actions taken and work performed by the organisation. The reference is the counterfactual activity to which the organisation’s activity is compared.

Output(s) are the direct results, (financial capital, goods or services, material resources or externalities) of the activities. Outcome(s) are the direct or indirect welfare effects on stakeholders of an activity. An outcome can be caused by inputs or outputs.

Impact is a change in a valuable and measurable outcome with respect to a reference scenario. It can be positive or negative, intended or unintended.
3 Impact measurement and valuation

**Impact measurement and valuation** (IMV) is a methodology for quantifying non-financial impacts into monetary units. There are various initiatives providing guidance on the identification and measurement of impact. These approaches cater to a wide range of industries. This document follows an IMV approach that is tailored to the financial sector.

In order to gain a cohesive picture of the effects of their lending, financing, and investing, banks require specific guidance throughout their value chain. To capture the full scope of a bank’s impact, this IMV approach includes four critical elements, namely quantification, valuation, attribution and aggregation. These four elements are outlined briefly below. For more detailed information on each, please refer to BFI’s **vision paper** and **Impact measurement and valuation for banks**.

1. **Quantification:** The process of measuring the outcomes of activities in quantitative units. Many impacts can be easily measured e.g. the amount of CO₂ emitted. Others cannot be quantified easily and require more work e.g. well-being from employment.
   **Benefit:** By quantifying outcomes, measuring, tracking, managing and reporting on different types of impact can be done clearly and consistently.

2. **Valuation:** Following quantification, impacts are translated into monetary values. This places different types of impact into the same context (monetary).
   **Benefit:** This way they can be easily compared and inform decision making. In comparing alternatives, impacts can be valued in positive and in negative terms. Valuations can provide insights into whether gains outweigh losses.

3. **Attribution:** Banks create their impacts, to a large extent, indirectly, through the facilitation of client activities e.g. lending. Only a small proportion of impacts are created through direct operations e.g. paying of staff. Banks are still partially responsible for their indirect impact. Determining how responsible the bank is, and transferring a proportion of the impact from client to bank, is called attribution.
   **Benefit:** This is an important step to avoid double counting of impacts in the value chain.

4. **Aggregation:** The final step in the IMV is aggregation. Care should be taken to avoid loss of information during the process, and standards need to be set for what types of impacts can be aggregated. As an example, if certain factors, e.g. child labour and CO₂ emissions, are combined, they are no longer accurately reflected. In **Chapter 8** of this document more detail is provided on this.
   **Benefit:** Aggregation facilitates better comparability of, and decision-making on, impact information i.e., about the entirety of a company rather than its individual practices.
We acknowledge that there are many other IMV initiatives in the field. Our aim is to complement existing initiatives with concrete guidance and tools tailored to the financial sector. We continuously seek to align our approach with other IMV initiatives such as the Value Balancing Alliance and the Impact Management Project (IMP).

This document refers to and provides guidance on the concepts outlined above.

**What makes IMV different from ESG?**

ESG is about the incorporation of environmental, social, and governance (ESG) considerations into corporate management, business decisions and investor’s portfolio choices. ESG factors are typically assessed using non-financial data on environmental issues (e.g., carbon emissions), social issues (e.g., employee turnover) and governance attributes (e.g., board structure or policies).

IMV differs from ESG in several ways:

- IMV consistently addresses the way stakeholders are actually affected by activities (the impact-level), whereas ESG reporting is often input or output focused e.g. amount of pollutants emitted or tons of waste generated. Corporate behaviour such as having policies around employment practices and data protection contribute to higher ESG ratings. IMV attempts to understand the extent to which stakeholders are affected by these organisational policies and activities.

- IMV aims to primarily measure an organisation’s impact on its stakeholders, for example employees and society at large. Many ESG ratings focus primarily on assessing the potential economic, social and environmental risks on the company and its shareholders. Based on this, ESG ratings may overlook metrics that significantly affect a stakeholder but do not pose a significant risk to the organisation.

- IMV values impacts, this allows for comparability across results. Monetisation of impact is a specific form of valuation through which a diverse range of impacts can be expressed in a common monetary unit. This requires the use of monetisation factors which are designed to reflect the normative desirability of the impact. ESG metrics on the other hand are expressed in different units. This limits comparability across ESG metrics and limits their usefulness for decision making and steering.
4 Principles for impact measurement

4.1 Principles

When measuring impact, established principles can help to ensure reflective results. The following principles offer general guidance and provide structure for your bank when applying impact measurement and valuation. These principles are described in the Impact Weighted Accounts Framework (IWAF) and have been adapted here for practical guidance for impact measurement.

- **Materiality based**
  Impact is considered material if it satisfies one of the following criteria (double materiality): (i) the impact materially affects the future earning potential of the company; (ii) the impact materially affects the welfare of one of more (external) stakeholder groups. This principle aims to ensure that the most significant impacts (in terms of size, importance to stakeholder groups and contribution to the overall impact of the bank) are included.

- **Coverage**
  An overview of a bank’s impact is complete if it covers its material topics and sufficiently reflects significant economic, environmental, and social implications to all its material stakeholders. Stakeholders should be able to assess the bank’s performance in the relevant reporting period. Ideally, the overview of the bank’s impact is as concise as possible. These principles ensure that no material impacts that are of importance to any stakeholder group are omitted in the communication of a bank’s impact.

- **Multi-dimensional**
  Considering multiple impacts across different capitals and stakeholders is important in an impact assessment. The goal is to adequately reflect different forms of value creation for different stakeholders. This principle ensures that no important effects are excluded and that not only financial capital and investors are considered as the focus of the assessment.

- **Valued in a commensurable unit**
  Wherever possible, it is important to express impacts in the same unit. Impacts often have their own quantities and units such as Kilotons of CO2 emissions or DALYs lost. Valuation can help to convert all impacts to the same unit, to reflect their value to stakeholders. This warrants that results are comparable across impacts.

- **Welfare-based**
  Impact is measured based on two welfare dimensions: (i) the well-being of people and (ii) the respect of basic social and environmental rights.
• **Aggregation only within welfare categories.**
  Impacts should not be aggregated across different welfare dimensions (for example, an impact within the well-being dimension versus an impact in the respect of rights dimension). This ensures that a violation of one stakeholders' right is not justified by an increase in well-being of another stakeholder. Hereby, impact results are balanced and negative stakeholder rights impacts are clearly disclosed.

• **Sufficient distinction**
  When aggregating impacts, it is important to ensure that detail is conserved with regards to; types of impacts, capitals and welfare dimensions to allow for a correct interpretation of results. This principle guarantees that impact information is representative of the value created by the bank and that no relevant information is hidden from the user and decision maker.

• **Conservation of impact**
  When aggregating impact, it is important to ensure that double counting is avoided. Attribution is used when the impact of own operations and that of value chain partners is included to avoid double counting. This is to ensure that the impact of an organisation is not misrepresented through aggregation.

• **Neutrality**
  An impact assessment is considered neutral if it is impartial and provides factual information. This principle helps to prevent bias in any material direction, in particular bias favourable to the bank.

• **Conservativeness**
  A conservative approach aims to prevent bias towards the bank. Thus, when two otherwise equally good choices are available, the approach that has the least favourable impact must be chosen. This principle ensures the result is objective, neutral and free from bias.

• **Transparency**
  In impact measurement and valuation, the data sources, assumptions, limitations, and omissions used in the assessment need to be disclosed transparently. This warrants that any data and elements of model design that have high uncertainty regarding sensitivity to the impact measurement are tested. Hereby, the reliability and validity of the bank's assessment is increased.

• **Verifiability**
  Ideally impact information is compiled to enable validation through a third party. As outlined in the 'transparency principle', important calculation steps, data sources and assumptions need to be disclosed transparently. This principle ensures the credibility of the impact results.
• **Consistency**
This principle is satisfied if consistent assumptions, calculation methods, imputations or estimates are used throughout the assessment. Best practice calculation methods should be followed, where available, to allow for comparability between reports over time. This principle ensures the reliability and comparability of the bank’s assessment as it measures and values its impacts consistently.

• **Proportional rigor**
When conducting impact measurement and valuation, the use of scientific, economically robust and generally accepted data and methods is important. Robust data and methods mean that they can be ensured, i.e., a carefully followed procedure where choices reflect the actual situation as best as possible in terms of calculations, input data, assumptions, etc. The effort should be proportional to the materiality of the impact for the stakeholders and the capacity of the organisation to produce impact information.\(^7\) This principle ensures that the result of the bank’s assessment is representative of the actual situation. It also increases the reliability and validity of the bank’s assessment, as it presents the assessment in an auditable manner and free from material error.

• **Best available approach**
When conducting an impact assessment, it is important to ensure that a suitable and robust approach is followed in scoping, measuring and valuation steps. This improves the reliability of results.

• **Impact pathway based**
The measurement and valuation of the bank’s impact is based on impact pathway logic. This includes (scientific research), bank information and expert and stakeholder opinion. This principle makes certain that impact measurement and valuation follows a sound logic. Employing this logic consequently can also ensure comparability between reports and banks.

• **Complete reference view**
Impact is defined with respect to a reference. Both absolute and marginal references can be relevant in the impact assessment. It is important to clearly describe the references used in impact calculations. This principle ensures that impact is compared to an explicit alternative scenario. This helps to interpret impact results in the right context and avoids the misinterpretation of results.

\(^7\) Table A.1 in appendix A of the **BFI Document – Supplement 1** contains a list of reliable sources for indicators, impact factors and monetization and conversion factors.
Value chain responsibility
Organisations can be co-responsible for impacts associated with the operations of their value chain partners. In relevant cases for the impact assessment, it is important to consider direct and indirect impacts.
This principle ensures that both direct and indirect impact of the bank is included in the impact assessment.

For other specific principles for disclosing impact information, please consult IWAF.
5 Stages of impact assessment

Impact assessment typically follows a number of well-defined stages and steps. Not all stages and steps will be followed to the same degree of detail in every reporting period, and the process can be more iterative than the model described below.

Figure 3 provides an illustration of the process.

The three stages of the impact assessment process:

I. Frame – to initiate the assessment of the bank’s impact;
II. Scope – to define the boundaries of the impact assessment;
III. Measure and value – to quantitatively measure all impact based on the scope defined in the previous stage;

This chapter describes the principles behind each stage and provides certain guidance for their execution.

Figure 3. A schematic of the phases and steps in compiling and reporting impact-weighted accounts

Adapted from IWAF.
6 Frame

Figure 4. Overview of steps, goal and key results of this chapter

6.1 Step 2: Define the objectives

Goal: To define the goal of the impact assessment. This will ensure that the output of the impact assessment is aligned with the needs of the bank.

Activities:

1. Understand the context of the impact assessment
2. Identify the objectives of the impact assessment and its relevance to the bank.

Activity 1: Understand the context

Before starting an impact assessment, it is important to understand the context in which it is performed. It is necessary to identify the intent, purpose and strategy of your bank. This helps to determine the focus of the impact assessment and the interpretation of the results.

If your bank has thus far not defined a clear purpose or intent, then a value creation model can help in gaining an initial understanding of the value your bank creates for different stakeholders. More detail on what a value creation model is and can look like, will be illustrated in a future supplement to this measurement guide.

Activity 2: Identify the objective

The objectives of an impact assessment need to be clearly defined in this activity. In particular, the bank should ask, ‘Once we understand our impact, what will we do with this information?’
Impact information can serve a number of objectives, for example:

- **Understand value**
  Banks create value for their clients and society through a myriad of ways. Understanding how these effects work, what the key drivers are, and what impact is created can help to identify techniques to steer the bank towards optimising value creation. In addition, monetising impacts creates a language that not only an expert, but also a large audience, can understand.

- **Understand risks**
  Banks can conduct impact assessments to understand where their largest impacts occur - in what portfolios or in what sectors - and what they are. Understanding these impact risks helps to prepare the bank for potential incoming regulation risk and reputation risk.

- **Manage**
  Banks can use the results of an impact assessment to identify drivers to manage their impact, using the drivers within their control to increase positive impacts or mitigate negative impacts. Here, banks can decide to focus on material impacts linked to their own activities but may also choose to look at impacts, that may not currently be material, but that would help address a specific country and regional need. For example, a bank may not offer students loans, but after identifying that access to higher education is an issue in the region that they operate, may decide to target this as an area for potential positive impact and develop a product to target this. Business decisions, which are usually driven by financial expectations, can also be enriched with impact information to aid in more informed decision making and trade-offs.

- **Report**
  Banks can publicly disclose the results of any impact analysis. Reporting on impact demonstrates accountability from the bank and helps banks to meet increasing expectations of regulators and society on the role of banks.

---

**Fictional case study**

Fides Bank is aware of the value it provides for its clients through its high quality and innovative consumer banking solutions, its secure and lucrative asset management services for high net worth individuals, and its commercial loan offerings. It is also aware of what it offers investors in terms of steady dividend payments.

However, Fides does not know how its activities might be affecting the planet and stakeholders beyond their immediate clients. It would like to get a grip on the impact across the entire bank to be able to identify risks and report these to its stakeholders.

Its main aim is to report on its impact, but it would also like to understand where impact arises within the bank.
7 Scope

Figure 5. Overview of steps, goal and key results of this chapter

Link: Resources to enrich the guidance steps outlined in this chapter can be found in Supplement 1 (chapters 2 and 3). They include information on business lines, activities, inputs, outputs and impacts relevant to banks. Lists provided in these chapters are not complete, but include some standard inputs, outcomes and impacts to make impact assessments more comparable between banks.

Additional resources

Here, additional resources relevant to scoping an impact assessment are provided:

- United Nation Environment Programme Finance Initiative’s (UNEP FI) Principles for Responsible Banking (PRB) Portfolio Impact Analysis Tool
- The B impact Assessment
- Capitals Coalition, Social & Human Capital Protocol
### 7.1 Step 2: Choose organisational focus

**Goal:** Decide which parts of the bank - either business lines or products and services - are in scope for the assessment.

**Activities:**

1. Decide on the breadth of the impact assessment.
2. Identify and select the focus of the impact assessment.
3. Identify relevant stakeholders.

**Activity 1: Decide on the breadth of the impact assessment**

The aim of this activity is to decide whether the impact assessment will have a broad scope – with an aim to cover all products and services that lead to large material impact – or will be more focused – perhaps on one business line, product, portfolio or even one investment.

Limited scope assessments can be advantageous, as they offer a good way to start incorporating impact and impact thinking into the bank. Due to the limited scope, they also might offer time for more detailed granular analysis and a richer understanding of a specific topic. For example, an impact assessment into two investment portfolios with different investment strategies can offer insights into the pros and cons of each. A detailed impact assessment of microcredit policy can provide insight into how value is created for customers and into potential drivers for increasing value creation.

**Activity 2: Identify and select focus of the impact assessment**

Select the products and services, business line or portfolios in scope.

**Full scope analysis:**

If you are aiming to make an assessment of your entire organisation, in principle, all business lines and products should be analysed. However, pragmatically, the scope can be reduced by excluding business lines or products that contribute little to the overall revenue or profit. However, in this case a business line or product may only be excluded if it contributes a small amount to revenue and is unlikely to generate a large impact (either in the absolute or marginal scenario). The exact scope should be disclosed when reporting or discussing the impact results.

**Limited scope analysis:**

If the impact assessment takes a narrow focus, the specific portfolios, investments and products or services are selected.

In both cases, it is important to remember that for banks, the vast majority of their impact lies in their value chain. Therefore the value chain will be an important part of most impact assessments.

Whether a full or limited scope is selected, the exact boundaries of the assessment, in terms of products and services, should be well documented.
Activity 3: Identify relevant stakeholders

The goal of this step is to identify stakeholders relevant to your bank. Identifying stakeholders is an important exercise, because it gives you insights into the different needs the bank is catering to. This will form the basis of understanding the relative importance of impacts considered in the materiality assessment.

Consider different stakeholder groups in scope for the impact assessment. As mentioned previously, stakeholder groups are often categorised into four different groups, namely clients, employees, investors, and society. Suppliers can be taken as a separate stakeholder group or combined with society, depending on the focus of the study and the insights required.

It is helpful to divide the stakeholders who are affected by an organisation into stakeholder groups, with those affected most similarly being grouped together. For more details on stakeholder classifications, please refer to the Conceptual Framework for Impact-Weighted Accounts.

Fictional case study | Fides Bank

Activity 1: Decide on the breadth of the impact assessment

Fides Bank aims to perform a full scope analysis, in alignment with its objective to get a full understanding of how its activities affect people and the planet.

Activity 2: Identify and select focus of the impact assessment

It looks into what its major activities are, in terms of income generation, and selects the following:

- Mortgage lending and retail banking services like deposit accounts.
- Commercial lending, both to small and medium-sized enterprises (SMEs) and commercial companies.
- Corporate lending.
- Asset management.
- Procurement.

Activity 3: Identify relevant stakeholders

Fides Bank generally describes its stakeholder groups as:

- Customers, which include both private individuals and households as well as business and institutions to whom they loan money and provide investment advice.
- Investors such as equity holders.
- Employees of the bank, including permanent and contract staff.
- Society, this is a broad group which include suppliers, workers of companies in Fides’ supply chains and, broadly, people affected by environmental externalities such as pollution.
DBS Bank is one of the largest banks in Asia, especially South-East Asia. As a purpose-driven bank, DBS is committed to creating long term value by managing its business in a balanced and responsible way. It recognises its obligations to multiple stakeholders and strives to consistently deliver value to all of them, now and in the future.

One of the main activities of DBS is lending. It realised that the impact of its lending depends on the activities of its clients. Hence, to create more value, it first needed to better understand the impact of its clients’ activities. Understanding the types and magnitudes of the impacts that DBS creates is an important step towards better informed lending decisions. This can help to steer the bank’s corporate lending portfolio to create more long-term value for the economy, society and the environment.

Therefore, as one of the first steps of understanding its impacts, DBS conducted two pilot studies, focusing on its lending activities to the palm oil and automotive sectors. The automotive sector was chosen because DBS is working with clients to enable the transition to electric vehicles and wants to understand the environmental and social impacts of such a transition. As for palm oil, DBS recognised that it could play a role in achieving a more sustainable palm oil sector through its lending.

Full reports can be found here for both the automotive and palm oil sector studies.
7.2  Step 3: Scope the impact assessment of the products and services

Goal: Define the boundaries of the impact assessment and identify potentially relevant impacts.

Activities:

1. Understand activities in scope for the product and services.
2. Map the value chain and wider system.
3. Choose type/s of impact.
4. Identify reference scenarios.
5. Define impact pathways and identify a longlist of impacts.

High-level impact pathways are a useful tool for identifying relevant impacts. The activities in this step work towards developing an (or many) impact pathways per activity, in order to identify a longlist of impacts.

As shown in Figure 2, there are five parts to an impact pathway: inputs, activities, outputs, outcomes and impact.

Inputs: Inputs are the resources (financial, human, manufactured, natural or other) used by the company to carry out its activities. Technically, inputs are direct effects of the bank's activity that occurred over a specified period and which constitute a voluntary and positive capital change to the bank.

Activity: The company's activities are the business operations it undertakes during the measurement time period. These include all the processes that the bank does which make the outputs possible.

Output: Outputs are the direct results (financial, goods and services, or externalities) of the activities. The results could include products or services produced, change in financial capital, resource creation or externalities. Generally, the bank has control, to some extent, over its outputs. Identifying these parts is critical to understanding the outcomes and impact of the company.

Outcomes: Outcomes are the effects of the inputs and outputs on the welfare of stakeholders. Stakeholders include people such as employees, customers, society and the planet.

Banks have no direct control over outcomes, unlike inputs and outputs. Outcomes can be both intended and unintended. Intended outcomes can be the direct effect on the relevant stakeholders resulting from the bank's activities. For example, consumers gain welfare by using the product that is produced by the bank. Unintended outcomes can be the indirect results that happen to the affected stakeholders due to the bank's activity to produce the product or service. For example, the effect on climate due to the emissions resulting from the production activity.

Outcomes are defined for each activity, from each input and output. To define them, research is undertaken to understand what effect could arise from each activity, input and output. This is especially important to understand the externalities, as they are often not considered but are material nonetheless.
For both marginal and absolute impact, outcomes should be defined for both the bank’s activities and the reference scenario. In both cases, the bank should consider the timelines in which the outcomes occur. It is because some outcomes may happen later, after the activity has occurred, and still need to be considered. In other words, all outcomes that arise from the activities within the time in scope should be included.

**Impact:** To identify the impact of the company, these outcomes are compared to those in the chosen reference scenario. Impact is defined as a change in a valuable and measurable outcome with respect to a reference scenario during a given timeframe. In other words, the impact is the difference between outcomes produced in the activity and the reference scenario. The list of key impacts in Supplement 1 provides information on which outcomes link to which impact. It also helps the bank to link the impact to its respective capital. This list is not complete, but aims to include most of the impacts relevant to banks. Some impacts listed here may not be material enough for the bank to include in the assessment.

**Activity 1: Understand the activities in scope for the product and services and the related inputs and outputs**

For each of the products, services or business lines in scope, the activities of the bank should be well understood. The related inputs and outputs should also be identified.

**Consult:** Product owners or business line managers should be consulted for their specific expertise.

**Activity 2: Map the value chain and the wider system**

**Map the value chain to identify which impacts occur in each step**

The bank’s responsibility does not stop at its own operations; it has a co-responsibility for its entire value chain. As a result, to understand the impact of the bank, it is necessary to understand its full value chain.

A value chain consists of three components: ‘upstream’, ‘own operations’ and ‘downstream’.

Impact that arises from the bank’s own operations is called **direct impact**. Impact that arises upstream or downstream is called **indirect impact**.8

Upstream, your bank has both suppliers of goods and services and providers of capital for lending and financing activities. Downstream, the bank has clients that use its services (downstream operations). Both types of suppliers and clients provide critical support to the bank’s ability to function. This value chain structure is illustrated in Figure 6.

---

8 All companies share responsibility for the impact which arises in their value chain. They are, however, more responsible for their direct impact than their indirect impact as it is assumed they have much more control over impact arising from their own operations. This difference is accounted for in the attribution step, where they are attributed a larger percentage of their direct than their indirect impact. See chapter 7.4, for more information.
The relationship between the bank and their suppliers and clients is represented by two common types of value chains:

- Business-to-consumer (B2C) value chains, where banks directly provide a service to consumers.
- Business-to-business (B2B) value chains, where banks provide a service to businesses or other organisations (such as non-profits or governments).

To determine the impact for the bank, B2C value chains and B2B value chains should be assessed separately. B2B services are part of a longer value chain than B2C services, in the sense that for B2B services there is a downstream value chain with additional businesses.

When banks provide a service to their clients (through B2B services), it results in the stimulation of economic activity of their clients. This stimulation of economic activity also subsequently stimulates the value chain of that client. As a result, banks are considered co-responsible for (positive and negative) impacts in the full value chain of their B2B clients, including both upstream and downstream.

Therefore, it is required that when measuring the bank’s impact, the full value chains of B2B clients should be modelled. A share of the (positive and negative) impact of the B2B clients is transferred to the Integrated Profit and Loss (IP&L) of the bank.
Practical challenges

Due to nature of their business, which entails capital provision to a wide number of companies, each with their own value chains, the overall value chain of a bank can be very complex and thus poses a challenge to mapping.

Data can be used to do this more efficiently. Global databases, see Appendix A of Supplement 1, can provide insight into the way that certain sectors, on average, trade with other sectors and countries. Banks can use these databases to identify a good estimate of the value chains of their clients.

Fictional case study | Fides Bank

Activity 2: Map the value chain and the wider system

Fides Bank maps its value chain by identifying its upstream and downstream partners

Activity 3: Choose type/s of impact

There are two types of impact which arise, depending on your frame of reference, for the bank's activities. The two types offer different approaches to understanding impact and each type of impact is more suited to a different type of impact assessment with different objectives.

Absolute impact provides information on the absolute scale of the outcomes of the organisation's activities. Typically, absolute impact arises in comparison to a situation where the bank does not exist. Carbon emissions of the bank, as they are ordinarily talked about, are an example of an absolute impact. Banks report the volumes they actually emit, not the difference to a reference.
Benefits of absolute impact:

- Provides insight into the impact of the banks themselves.
- Especially useful for negative externalities as it gives the amount of damage that is directly related to the bank. The UN (United Nations) Guiding Principles on Business and Human Rights and the OECD (Organisation for Economic Cooperation and Development) Guidelines for Multinational Enterprises state that (multinational) businesses have a responsibility to remediate the negative impact of their operations. Measuring absolute impact avoids the impression that banks do not need to act because they perform as good as, or better than, their competitors.

Marginal impact provides information on the outcomes of the bank’s activities relative to the most likely outcomes in the absence of that organisation. For ‘marginal impacts’, the reference scenario describes the activities that would most probably have occurred had the bank not undertaken its activities. Typically, the marginal impact for the bank is the bank’s impact compared to its direct competitors. If the bank offers services that are very similar to its competitors, the marginal impact will be close to zero. It therefore might not be an insightful measure of impact. Where it can be useful is to assess the impact of specific investments which aim to improve the status quo or are innovative or disruptive. For example, an investment in a wind energy company will likely create large positive marginal impact when compared to an investment in a standard energy company.

Benefits of marginal impact:

- Marginal impact offers insights on how the bank compares to their direct competitors.
- Marginal impact can be insightful when focusing on the effect of supporting disruptive or innovative investments.

The two types of impact provide different views of the impact of an organisation; both types can be assessed to get a complete picture of the impact of an organisation. It is important to remember that absolute and marginal impact cannot be directly compared, given their different reference scenarios.

Fictional case study | Fides Bank

Activity 3: Choose type/s of impact

Fides Bank elects, for the current impact assessment, to focus on absolute impact in alignment with its objective to get an understanding on what its impact is on society, without comparison.

Fides is also only just starting to measure its impact and so, for feasibility, elects to focus only on absolute impact, rather than additionally including marginal impact.
Activity 4: Identify reference scenario/s

Based on the type of impact, reference scenarios may need to be identified. Using an absolute reference scenario will enable the bank to assess absolute impact and a marginal reference scenario will enable the bank to assess marginal impact.

Absolute reference scenario

The absolute reference is a situation where there are no other banks present. Using an absolute reference gives rise to absolute impact.

Marginal reference scenario

The marginal reference compares the activities of the bank to the situation that would most likely occur if the bank was not present. Usually this means a comparison to its direct competitors. Using a marginal reference gives rise to marginal impact.

Fictional case study | Fides Bank

Activity 4: Identify reference scenario/s

Following the decision to assess absolute impact, Fides defines an absolute reference scenario, which is a no activity scenario. One illustration of how this works in practice is that in reality, Fides employs staff who earn a salary, and experience well-being due to work. In an absolute reference scenario, Fides does not employ any staff and they do not find work at another company, they therefore do not earn a salary nor experience well-being.
Spinderwind is a part-citizen owned wind farm in the Netherlands. It is a sustainable energy investment by BOM (Brabantse Ontwikkelings Maatschappij) which aims to contribute to the energy transition and wants to understand the potential of wind farming in order to do so. In the impact assessment, to better understand how Spinderwind makes a difference, they chose a marginal reference scenario, and define it as a situation where Spinderwind is not operational but instead the energy supply is replaced by the Netherlands’ energy grid (and thus the average Dutch energy mix, which in 2019 was 84% fossil fuel based). For the environmental impacts, the difference in emissions from energy produced by Spinderwind and that of energy produced under this reference circumstance provides insight into the limitation of environmental impact by Spinderwind.

The full report can be found [here](#).

### Activity 5: Draw impact pathways and identify impacts

In this activity, the goal is to expand the work done in the previous activities and map impact pathways in order to identify impacts. These pathways are similar to those shown in [Supplement 1](#).

Here, the bank identifies outcomes associated with both its inputs, activities and outputs and in the chosen reference. Outcomes describe the way stakeholders are affected. The difference between the outcomes that arise in the actual scenario and in the reference describes impact.

To check whether the impact scope is complete, a number of sources can be consulted:

- [Supplement 1](#) provides a list of key impacts
- UNEP FI’s PRB Portfolio Impact Analysis Tool for Banks
- Global Impact Investing Network (GiIN)

The PRB Portfolio Impact Analysis Tool for Banks can also be used to identify impacts. Instead of identifying impacts from bank activities and their inputs, the PRB tool also looks at specific country needs to identify impacts to focus on. For more information please refer to the [tool](#) and the PRB [website](#). This can be used to identify potential areas for positive impact.

All impacts identified should relate to one of the following six capitals. For definitions of the capitals listed below, refer to the [Conceptual Framework for Impact-Weighted Accounts](#) for more detailed information.
• Financial Capital
• Manufactured Capital
• Intellectual Capital
• Human Capital
• Social Capital
• Natural Capital

Direct impact pathways

Direct impact pathways very closely resemble those shown in Figure 2; in these cases the bank directly influences the outcomes affecting stakeholders.

Direct impact pathways give rise to direct impacts, impacts that arise from the operations of the organisation itself.

These impacts often arise out of B2C value chains or directly at the business clients involved in the B2B value chains.

Fictional case study | Fides Bank

Fides Bank has an active mortgage department, which finances mortgage loans for consumers. They perform a high-level impact pathway check to identify outcomes and impacts

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Activities</th>
<th>Outputs</th>
<th>Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>All bank inputs e.g. buildings, employees, technology, funds etc.</td>
<td>Bank lends money to consumer clients which enable them to purchase homes</td>
<td>Mortgage loans enabling house purchases for clients</td>
<td>Consumer client value through increase in house value (+)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Physical property asset for client, the value of which increases (decreases)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Financial</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Are there other financial benefits/costs? Consider interest rates and remortgaging costs</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>If remortgaging is more expensive than interest payments, reduction in costs</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Social</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Well-being from owning a house (+)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Costs of well-being from struggling to pay back loan (-)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Social benefits of home ownership (+)</td>
</tr>
</tbody>
</table>

Indirect Impact Pathways

Indirect impact pathways have an additional step to account for the fact that the impact arises only as an indirect effect of the activities of the bank. These pathways give rise to indirect impacts, impacts that arise due to the activities of value chain - or system - partners. In these impact pathways, the outputs of the bank (for example, the loans they provide) provide a key input for another business (for example, financial capital for a business that takes the loan). Part of the impact that these businesses create is the indirect impact of the bank. Illustration of this concept is shown in Figure 7. For a list of indirect impacts,
please refer to the standard list of impacts in Supplement 1. Additional indirect impacts can be found in the PRB Portfolio Impact Analysis Tool for Banks.

**Figure 7. Indirect impact pathway**

There are two types of indirect impacts that the bank can identify:

1. **Indirect impacts from value chain operations:** these can be separated into upstream and downstream impacts. These impacts are often the most material for a bank, as their value chains are large and complex.

2. **Indirect impacts from the system:** these are impacts from outside the bank’s own value chain. For instance, this can be through lobbying activities that help third parties innovate and improve their impact. These impacts are usually more difficult to assess as they depend on forecasting the actions of (and getting information about) banks and value chains far removed from the bank being studied. Estimates of this impact can often be less accurate than of the other types. It is worth considering this when deciding whether to conduct an assessment of the bank. If the bank has mostly impact that is indirect and system-wide, such as advocacy or lobbying, the assessment will be more difficult and will, potentially, produce less accurate results. A potential solution to this issue is to perform a semi-quantitative assessment. This will likely entail many assumptions, which is why it is important to disclose that the results are less robust than others. Even if impacts cannot be quantified, if they are likely to be material, it is recommended to acknowledge they exist during communication.
**Fictional case study | Fides Bank**

Fides Bank has a commercial lending department which loans to a large portfolio of business clients. It also draw indirect impact pathways for this activity.

Given the nature of its portfolio which includes loans to companies in the aviation sector as well as a wide range of developing economies, it is sure it has indirect natural and social impacts. However, given the size and diversity of the portfolio, it is unsure of exactly what these impacts are.

Fides therefore consulted a global database, which provided insights on the most material impacts in each sector and country. This informs the materiality assessment in step 4.

**7.3 Step 4: Select impacts for further analysis**

The goal of this step is to select, from the preliminary list of impacts determined in the previous step, which impacts will be quantitatively assessed in the next stage.

**Main results from this step:**

- A short list of impacts
There are three criteria that can be used to select impacts that will be quantitatively assessed going further, as shown in Figure 8:

**Figure 8. Decision criteria for impact selection**

**Activities:**

1. Assess materiality.
2. Assess feasibility.
3. Consider strategic focus.
4. Select impacts to shortlist.

**Activity 1: Assess materiality**

Conduct a materiality assessment to select the most material impacts. A materiality assessment is an evaluation of the materiality or relative importance of each impact. It can be safer in this step to determine impacts that are not material, and can be left out, rather than only trying to determine those that are specifically material.

Materiality assessments provide important documentation of critical choices and assumptions made during the scoping process and entails the following:

- Consulting the literature and previous impact assessments to establish what impacts are most relevant in the context. This can be based on which impacts are mentioned most often or are regarded as being more significant than others. In addition, there are global databases that provide information on which impacts are typically associated with various activities in specific countries and economic sectors.
- [UNEP FI’s PRB Portfolio Impact Analysis Tool for Banks](#) can be used to provide impact information, on assets within a portfolio, at a sector level. They also provide country needs scores, which provide insight into which impact topics are most important to a country, in terms of need, based on global data.
- Consulting with experts and relevant stakeholders to generate consensus on the assigned score.

**Activity 2: Assess feasibility**

In this activity, the practical feasibility of measuring the impacts is assessed. The final scope of an assessment is sometimes influenced by what is feasible given existing knowledge on the subject, time constraints and data availability. For banks, especially in top-down assessments of entire portfolios, data availability can significantly limit feasibility. This can, in particular, be true of many social impacts, where
data is not always accurately recorded in many countries (for example, incidents of child labour). If material impacts cannot be assessed due to feasibility concerns, this should be disclosed, as it can lead to incomplete results.

Impacts that cannot be assessed with a reasonable degree of accuracy, and as a result are not part of the quantitative analysis, can still be taken into account semi-quantitatively. This can be done by comparing them to impacts which are measured quantitatively and scaling them according to expectation based on literature. If semi-quantitative assessment is not possible, impacts can be assessed qualitatively. This can be done by basing estimations of the impact sizes on literature or interviews.

Overall, feasibility can be assessed through the following:

- Perform a preliminary search of available data concerning the impact, see Supplement 1.
- Estimate the time needed to calculate the impacts and compare this to how much time is available.

Activity 3: Consider strategic focus

- If your organisation did not define a specific strategic focus, there is no need to include this criterion in the selection of impacts. However, users who do have a strategic focus or a specific theory of change can bear it in mind when determining which impacts are chosen. For example, an environmental preservation fund might not focus on intellectual capital impacts, but would instead require detailed insight into natural capital impacts. However, material negative impacts are important to consider irrespective of strategic focus, as excluding them can lead to inaccurate and biased results. It is also important not to only select additional positive impacts, based on strategic focus, as this can lead to a biased view.

Activity 4: Select impacts to shortlist

Select impacts based on the output of the previous three activities.
### Fictional case study | Fides Bank

**Activities 1-4: Assess materiality, feasibility, strategic focus, and select impacts to shortlist**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Capital</th>
<th>Impact</th>
<th>Materiality?</th>
<th>Feasibility?</th>
<th>Strategic focus?</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>In scope:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mortgages</strong></td>
<td>Manufactured</td>
<td>Client value through increases in house values</td>
<td>Medium</td>
<td>High</td>
<td>Medium</td>
<td>Fides Bank operates in a market with steady house price increases which customers benefit from, making this material.</td>
</tr>
<tr>
<td><strong>Social</strong></td>
<td>Financial distress due to difficulties in repaying loans</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
<td>Mortgage defaults are a prevalent issue at the bank and so the issue is material. Estimating financial distress experienced can be difficult so feasibility is rated medium.</td>
<td></td>
</tr>
<tr>
<td><strong>Social</strong></td>
<td>Social benefits of home ownership</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Operations-employment of people</strong></td>
<td>Financial</td>
<td>Payment to employees</td>
<td>High</td>
<td>High</td>
<td>Medium</td>
<td></td>
</tr>
<tr>
<td><strong>Human</strong></td>
<td>Well-being of employment</td>
<td>Medium</td>
<td>Medium</td>
<td>High</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Human</strong></td>
<td>Value to employees from training and experience</td>
<td>Medium</td>
<td>Medium</td>
<td>High</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Human</strong></td>
<td>Occupational health and safety incidents (mainly stress related)</td>
<td>Low</td>
<td>Medium</td>
<td>Medium</td>
<td>While there are low rate of health and safety incidents, this is included because employees’ health is considered of high importance and strategic focus.</td>
<td></td>
</tr>
<tr>
<td><strong>Social</strong></td>
<td>Gender discrimination</td>
<td>Medium</td>
<td>Medium</td>
<td>High</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category</td>
<td>Type</td>
<td>Impact</td>
<td>Materiality</td>
<td>Focus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------------------</td>
<td>------------------------------------</td>
<td>--------</td>
<td>-------------</td>
<td>--------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operations</td>
<td>Intellectual</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unintended breaches of data</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Change in brand value</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Profit</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Taxes</td>
<td>High</td>
<td>High</td>
<td>Medium</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contribution to climate change from business travel, energy use in office buildings</td>
<td>Low</td>
<td>Medium</td>
<td>Medium</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial</td>
<td>Change in brand value</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial</td>
<td>Profit</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial</td>
<td>Taxes</td>
<td>High</td>
<td>High</td>
<td>Medium</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural</td>
<td>Contribution to climate change in the value chain</td>
<td>High</td>
<td>Medium</td>
<td>High</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural</td>
<td>Environmental pollution in the value chain</td>
<td>High</td>
<td>Medium</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural</td>
<td>Use of scarce materials in the value chain</td>
<td>Medium</td>
<td>Medium</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural</td>
<td>Land use and transformation in the value chain</td>
<td>Medium</td>
<td>Medium</td>
<td>High</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human</td>
<td>Occupational health and safety incidents in the value chain</td>
<td>Medium</td>
<td>Medium</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td>Gender discrimination in the value chain</td>
<td>Medium</td>
<td>Medium</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td>Contribution to poverty in the value chain</td>
<td>Medium</td>
<td>Medium</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td>Contribution to human rights violations in the value chain</td>
<td>High</td>
<td>Medium</td>
<td>High</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Research on where the emissions of banks arise indicates this impact is likely to be much smaller than contribution to climate change from the value, so while it has low materiality it is of strategic focus for the bank and the work to reduce and offset this.

Land use strongly relates to biodiversity loss which is a key strategic pillar of the bank, hence high strategic focus.
### Out of scope:

<table>
<thead>
<tr>
<th>Category</th>
<th>Type</th>
<th>Description</th>
<th>Risk</th>
<th>Impact</th>
<th>Materiality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortgages</td>
<td>Financial</td>
<td>Client value through home ownership (financial savings of home owners vs renters)</td>
<td>Low</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Operations</td>
<td>Financial</td>
<td>Risk of financial crime and limitation of financial crime</td>
<td>High</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Lending, asset management and procurement</td>
<td>Natural</td>
<td>Contribution to job creation and economic activity in the value chain</td>
<td>High</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Human</td>
<td>Effects on human health associated with the products of the value chain partners</td>
<td>Medium</td>
<td>Low</td>
<td>Medium</td>
<td></td>
</tr>
</tbody>
</table>

- **Mortgages**
  - **Financial**
  - Client value through home ownership (financial savings of home owners vs renters)
  - Low materiality as there are only small financial savings for homeowners in comparison to renters, due to low rental prices.

- **Operations**
  - **Financial**
  - Risk of financial crime and limitation of financial crime
  - Although this is a highly pertinent issue for banks, there is currently no data available on how much financial crime still occurs. This limitation will be disclosed in all internal and external reporting.

- **Lending, asset management and procurement**
  - **Natural**
  - Contribution to job creation and economic activity in the value chain
  - Estimating the banks responsibility for job creation and economic activity in the value chain will likely be difficult to assess. Again, as this is material, its exclusion will be disclosed and explained.

- **Human**
  - Effects on human health associated with the products of the value chain partners
  - Through investments in pharmaceuticals and the food and beverages industry, Fides is aware it has both positive and negative impacts. However it does not have data available on the extent of the issue throughout its value chain.
8 Impact measurement and valuation

Figure 9. Overview of the steps, goal and key results of this chapter

Link: Resources to enrich the guidance steps outlined in this chapter can be found in Supplement 1 (Chapters 2, 3 and 4). Chapters 2 and 3 can mainly aid in step 5 of this section, focused on defining impact pathways. They include information on activities, inputs, outputs and impacts relevant to banks. Chapter 4 in the supplement document can provide useful information for steps 6 to 8. It includes a list of primary and secondary data sources. Lists provided in these chapters are not complete, but include some standard inputs, outcomes and impacts to make impact assessments more comparable between banks.

Additional resources

Here, additional resources relevant to impact measurement and valuation are provided:

- Harvard’s Impact Weighted Accounts Project.
- Social Return on Investment (SROI) provides guidance for measuring financial, social and natural capital impacts.
- Value balancing alliance, provides guidance on scoping, measurement and valuation of impact. Currently this covers mostly environmental impacts, but includes methodologies for some human and social impacts
- The Embankment Project for Inclusive Capitalism (EPIC) https://www.coalitionforinclusivecapitalism.com/ provides a framework to help organisations assess and measure their own impact.
- The Impact Management Platform provides a list of useful resources on estimating value creation.
8.1 Step 5: Define impact pathways

Goal: Define detailed impact pathways per impact to enable the bank to understand how impact arises.

Activities:

1. Draw/revise/refine impact pathways for the impacts in scope
2. Consult existing or accepted standards

Activity 1: Draw/revise/refine impact pathways for the impacts in scope

An impact pathway explains the way in which the bank’s activities eventually lead to an increase, decrease or transfer of capitals, stock or welfare. It includes all the cause and effect steps that are done to explain the way the bank’s activity results in an impact.

In step 3, the bank has drawn impact pathways for all relevant activities of the bank which results in a longlist of impacts. In step 4, the bank has narrowed down the scope by only focusing on a subset of the longlist of impacts.

Hence, in this step, impact pathways for each impact in scope is evaluated by revising and refining them. In particular, the bank should check the completeness of the impact pathways. For each impact that it would assess quantitatively, it should have an impact pathway. This step helps the bank to identify relevant impacts that may have been overlooked in the scoping stage. Additionally, it can help with defining impact calculations, by following the steps of the impact pathway and converting them into calculations.

Activity 2: Consult existing or accepted standards

For some impacts, there are already existing standards and sources which provide commonly accepted impact pathways. For example, environmental impacts have been well addressed in some sources. This can serve as a good base, although some tweaking may be necessary to fit specific circumstances. Thus, it is important to consult the sources for consistency. The sources are:

- Generally accepted standards (e.g., ReCiPe life cycle assessment methodology for Life Cycle Assessment – LCA)\(^9\).
- (Academic) research.
- Internal and external organisational information.
- Expert and stakeholder opinion.

The bank could also create its own pathway if existing methods are found to be inadequate.

---

Fictional case study | Fides Bank

Fides Bank created impact pathways, in particular for its direct impacts. This helped to ensure that the same logic was consistently applied to all impacts and that all effects were incorporated.

One example of an impact pathway was for well-being from employment.

8.2 Step 6: Quantify impact

Goal: Calculate the impacts in scope by using the impact pathway logic defined in the previous steps. All required data, measurement and valuation models (hereafter: ‘model’) are required in this step to quantify all the impacts in scope.

Activities:

1. Define the approach and method for assessing and valuing the impacts in scope.
2. Collect the best available input data and projections.
3. Quantify and calculate non-valued impact over time for the impacts in scope.

Activity 1: Define the approach and method for assessing and valuing the impacts in scope

The purpose of this activity is to choose a method for assessing the impacts in scope. The first decision is to choose an approach to assess each impact.

Broadly, there are three approaches to assess impact: bottom-up, top-down and hybrid analysis. The choice of which depends on the type of impact, desired level of detail and feasibility. Hybrid analysis is a combination of the top-down and bottom-up approaches. More details of each approach can be found in Table 1.
### Table 1. Comparison between measurement approach

<table>
<thead>
<tr>
<th>Approach is best suited for:</th>
<th>Data requirements</th>
<th>Benefits</th>
<th>Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1) Bottom-up</strong></td>
<td>Direct impact and indirect impact. For example, modelling the well-being of employees at the bank.</td>
<td>Company specific data, additional secondary data is needed to convert company data into impacts.</td>
<td>• Granular and specific results.</td>
</tr>
<tr>
<td><strong>2) Top-down</strong></td>
<td>Indirect impact. impact in the value chain in particular for B2B value chains.</td>
<td>Country-sector average data. Please refer to Supplement 1 for an overview of required data for your bank</td>
<td>• Feasible for assessing large and diverse portfolios.</td>
</tr>
<tr>
<td><strong>3) Hybrid analysis</strong></td>
<td>Direct impact and Indirect impact with limited bottom-up data. For example, modelling the occurrence of child labour in some countries within the value chain where data is scarce.</td>
<td>Country-sector average data, limited company data, trade data.</td>
<td>• Feasible for assessing large and diverse portfolios. • Creates flexibility in improving the most relevant part(s) without consuming time that is required for collecting bottom-up data.</td>
</tr>
</tbody>
</table>

Once an approach has been agreed upon, the exact calculation steps of the model should be agreed upon. This is more relevant for bottom-up calculations, where specific steps must be taken to turn the impact pathways into calculation trees for each impact, converting bank operational or output data into non-valued impacts.

The following section illustrates how this is done and how bottom-up and top-down approaches can be used to assess different types of impacts.
Direct impacts

Direct impacts from own operations

Direct impact from own operations will likely be assessed by adapting impact pathways in bottom-up calculations relying on company specific data.

Some impacts are already expressed in financial / monetary terms. Some examples are payments to employees, net profit or depreciation. These impacts can arise directly from line items in financial statements, such as income or cash flow statements. The valence of each impact (positive or negative) is based on the perspective of each corresponding stakeholder.

Impacts of own operations that are not expressed in financial terms, such as well-being effects of employment, contribution to climate change, pollution from emissions, human capital creation, etc., should be modelled by assessing the impact pathway of each impact.

Real case study | Harvard Impact-Weighted Accounts Project

Harvard’s Impact-Weighted Accounts Project developed a framework and methodology for the four most salient dimensions of impact for employees, including wage quality, career advancement, opportunity, and health and well-being, as well as two principle impacts, diversity and employment location, for the broader labour community. The calculation steps and data requirements are described in the paper, Accounting for Organization Impact.

In a second paper, Measuring Employment Impact: Applications and Cases, the methodology was then applied to eight leading companies, including Bank of America and Facebook. Employment impacts were calculated as a percentage of salaries paid, documenting wide variability in the results for companies and identifying opportunities for improvement.

Direct impacts for/on clients

Impact from bank’s downstream value chain impacts has two categories: direct impacts for consumer clients and indirect downstream impacts for business clients. Examples of direct impact for consumer clients are the impacts of the services offered by the bank, such as mortgages and deposit. Clients have to pay fees and/or interest rate to the bank. The payments for these services translate to two types of values that are created by the bank. First is the ‘internal’ part, which is negative financial capital impact for the clients, which is equal in size to the client’s payment. Second is the ‘external’ part, which reflects any surplus positive impact as a result of the clients enjoying the products or services offered by the bank. These impacts can be modelled through bottom-up analysis, as these rely heavily on the bank’s primary data.
Real case study | Alliander

In 2020 Alliander, a company that develops and operates energy networks, conducted a strategic impact analysis on the societal value of temporarily reducing the reliability level of the grid to accelerate connection of new clients and renewable energy generation. To do this, they conducted an impact assessment of the alternatives, including an assessment on how clients would be affected by the decision. They assessed the client losses incurred from outages and the value generated by being able to serve more clients. The analysis demonstrates that although (temporarily) reducing the reliability level can cause more downtime, the negative impact is much lower than the value created by accelerating new connections. The report can be found here (in Dutch).

Indirect – downstream value chain impacts

This impact reflects the second category of downstream value chain impact: indirect downstream impacts for business clients. The downstream impact of a bank usually includes the full value chain of the bank’s B2B clients. Banks provide these businesses in the value chain with a key input, in the form of the loans they provide or the investments they make. As a result, banks are considered to have co-responsibility for (positive and negative) impacts in the full value chain of their B2B clients, including both upstream and downstream. Due to the complexity of these value chains and the vast number of businesses involved, this impact is often modelled through top-down analysis. This entails using company data on the sectors and countries that the bank has lent to (or invested in) and incorporating analysis on the average impact arising in that sector-country combination and in the sectors that trade with it.

It is also possible to do some of this analysis bottom-up. For investments in particularly innovative companies, specific analysis of the individual companies can provide important insights. This method is explained in detail in Impact Institute’s Guide for Funders to Assess and Value Impact.
Real case study | ABN AMRO Impact Report

ABN AMRO conducts a bank-wide IP&L, including a top-down assessment of its lending and investment portfolios. As described in the published Note on Methodology, top-down analyses are based on data provided by Impact Institute’s Global Impact Database (GID). The GID has its basis in input-output analysis and combines several input-output databases and their environmental and social extensions. Downstream value chain impacts are first calculated per one unit of added value in a country-sector combination. This is based on the organisation’s direct impact and its upstream and downstream value chains. The GID provides multipliers for value chain impacts. For example, the interest income on a loan represents the added value of ABN AMRO in that value chain, together with its direct and indirect suppliers. This is a measure of its contribution to that value chain.

The result of this analysis reveals large externalities in the value chain, which accounts for 76% of ABN AMRO’s overall impact. The full 2020 report and methodology document are available online.

ABN AMRO bank is one of the largest banks in the Netherlands and it is one of the frontrunners in the financial sector on reporting on its value creation to society.
**Real case study | DBS lending to the automotive and palm oil sectors**

DBS started measuring impact through focusing on the activities of its clients in two specific sectors, palm oil and the automotive sectors.

In the automotive sector, DBS assessed the impact of both combustion engine vehicles and electric vehicles. In the palm oil sector, it compared the impact of lending to the palm oil sector industry average versus the palm oil sector with NDPE (No Deforestation, No Peat and No Exploitation) policy implementation.

These analyses required very specific sector insights which were difficult to achieve with most global-impact databases. They did a hybrid analysis where they combined sector and company specific data with top-down estimates which were used for gap filling and to estimate the rest of the value chain linked to these sectors.

The palm oil and automotive sector reports are accessible online at DBS’ Sustainability Insights.

A technical report and evaluation of the project was conducted and published by Singapore Management University.

---

**Upstream value chain impacts**

Impact from bank’s upstream value chain impacts includes those related to the suppliers of goods and services as well as of capital. The required data entails, for example, expenses to supplier and the sector and country of the suppliers, which can be obtained from bank’s primary data as well as secondary data. Due to the complexity of the value chain which involves many sectors and countries, this impact is often modelled through a top-down analysis, as described in the Downstream value chain section.

---

**Fictional case study | Fides Bank**

**Activities 1: Define the approach and method for assessing and valuing the impacts in scope**

For the impacts in scope, Fides identified high level and detailed approaches for its measurement.

For example, well-being from employment, gender discrimination and contribution to climate change from own operations are all direct impacts that arise from its activities and effect its employees. These are modelled bottom-up. Fides consulted a number of sources to enable these calculations.
Gender discrimination

In order to calculate the impact of gender discrimination, Fides uses the steps laid out in guidance included in Harvard’s Accounting for Organizational Employment Impact\(^{10}\).

Contribution to climate change

To measure its contribution to climate change from own operations it uses publicly available methodologies\(^{11}\).

Well-being from employment

For well-being from employment it developed its own calculation framework, inspired by other literature and research. This is modelled to consider the life satisfaction or well-being generated from employment, compared to the reference scenario of no employment.

Many of the impacts in scope for Fides lies in its value chains, and arises through its lending and asset management. To measure these impacts, Fides uses top-down analysis as the majority of its clients do not collect enough data for them to be able to quantify the impacts placed in scope (step 4) for themselves or their entire value chain. Fides plans to make use of a global database to do this, which contains impact data on a set number of sectors and countries.

\(^{10}\) Freiberg, D. Panella, K, Serafeim, G, and Zochowski, R.T, (2020) Accounting for Organizational Employment Impact

\(^{11}\) Galgani, P. et al., (2021) Contribution to Climate Change Impact-specific module for true price assessments
Activity 2: Collect the best available input data

To measure impact, data is required. There are two types of data required for the assessment: (i) Primary data, and (ii) Secondary data.

The next step is to collect primary data and secondary data. These data should fill every data point identified in the model / calculation tree. A range of types of data required, including its best possible data sources, is listed in Table 2.

Table 2. Relevant data sources for each data type.

<table>
<thead>
<tr>
<th>Types of data</th>
<th>Data sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank specific</td>
<td>Primary data from the bank</td>
</tr>
<tr>
<td>Value-chain specific</td>
<td>Primary data from the relevant organisations, where possible; otherwise proxy sector data</td>
</tr>
<tr>
<td>Sector specific</td>
<td>Secondary data (academic studies, LCA literature, etc.)</td>
</tr>
<tr>
<td>Region/country specific</td>
<td>Secondary data</td>
</tr>
<tr>
<td>Transnational data</td>
<td>Secondary data</td>
</tr>
</tbody>
</table>

**Primary data: data from the bank or organisation being assessed**

Primary data is the data obtained from the bank, which relates to its activities. When reporting its impact, the bank is expected to have the following data:

- Data related to its activities in a given timeframe (e.g. sales volume, number of employees, etc.)
- Data related to the outputs and/or ideally, outcomes of its activities, or its product or service (e.g., emissions, revenue, customer satisfaction, etc.)

Quantitative data is preferred. It may be the case that the bank only has qualititative data. For example, data on customers’ experiences: ‘50% of our customers’ experience indicates improved productivity through easier transfers.’ This type of data does not serve as adequate information for impact measurement. In this case, secondary data and assumptions are required to convert the qualitative data into quantitative estimates.

⚠️ Consult: Data owners or business line managers and value chain partners should be consulted for primary data. Data owners should be sufficiently involved and well informed regarding the needs of data and to ensure adequate traceability of the data. This also helps to make sure the data provided is reliable and valid. Any assumptions made when delivering data should always be well documented.

**Secondary data: Data that comes from sources other than the organisation being assessed**

Secondary data is the data obtained from external sources, such as global databases, scientific literature, etc. This data is usually used as complementary data and/or an estimate if certain primary data is not available.
More detailed uses of secondary data are as follows:

- To fill the gap of missing data of your bank. For example, your bank may not record data on externalities. Assumption and secondary data may be used to estimate the impact if it is deemed material and in scope. Secondary data that can be useful in this case is country- and sector-specific data.
- To estimate the impact arising within the value chain of your bank. An example of value chain data is CO₂ emitted in the supplier(s) side of the product produced by the bank.
- To calculate the marginal reference scenario (if there is no explicit or implicit information available based on their output and outcome data from your bank).
- To obtain conversion factors to convert outputs to outcomes. For example, the bank may only have the number of people employed. Conversion factor is required to convert the data into the measurable and informative outcomes, such as, improved life satisfaction due to having a job.
- To obtain monetisation factors. These factors are used to convert the footprints of the outcomes into monetised value. Consistent application of this data throughout the assessment is required.

If there is impact projection involved in the Impact Weighted Accounts (IWAs), data forecast should also be taken into account. You should predict how some relevant data within the bank will change over time. The forecast done on each relevant data is similar and dependent on financial forecasts. This forecast should also be applied to all scenarios identified when assessing impact-weighted accounts.

**Secondary data hierarchy**

Secondary data is complementary to primary data and can help to convert primary data into measurable and informative outcomes and/or serve as an estimate, should the primary data not be available. The role of secondary data is therefore considered crucial to creating a reliable and valid impact assessment. Hence, the following two dimensions should be considered when reviewing secondary data sources, in the order of preference:

1. **Scope - relevance**
   
   Secondary data that is retrieved from the most relevant existing impact assessment literature. The relevance of the study that is preferred is the one which is undertaken in the same geography (area level or country level – the more representative the better), in the same timeframe and under similar situations and conditions to the assessed impact. Below is the priority (in order of preference) that the bank should look for in scope if they use secondary sources:
   
   - Similar product/service
   - Similar geography
   - Similar population group
   - Similar period
2. **Validation of sources**

Secondary data that is retrieved from external sources should come from high quality and reliable literature. Hence, it is highly preferred that the source represents the best available literature which meets those criteria. The criteria can be measured by the degree that it is validated.

Examples of validated sources are official national or global databases/statistics, peer-reviewed academic journals or published life cycle analyses literature, etc. Examples of non-validated sources are reports by independent research organisations, news articles, unpublished data, experts’ opinion, etc. Below is the priority (in order of preference) that the bank should look for in validation if it uses secondary sources:

- Peer-reviewed research paper or meta-analysis and/or results of randomised control trial (RCT)
- Official statistics or published life-cycle analysis
- Single study or research report or triangulation of multiple studies
- Opinion of (trusted) expert

![Secondary data hierarchy](image)

**Figure 10.** Secondary data hierarchy

*Consult:* (External) expert to validate the reliability of the source used
Fictional case study | Fides Bank

Following the approach and methodology selected, Fides identified data requirements and then sourced the data from inside and outside the bank.

In terms of primary data required from within the bank two data points are required:

- Number of employees.
- Employee satisfaction score (ESS).

Both these data points can be sourced from internal reporting at the bank.

Secondary data that is required is:

- Employee satisfaction on average in the country.
- Effect of work satisfaction on life satisfaction.
- Average increase in life satisfaction from being employed.

These data sources are found through doing internet research on the topics and consulting the literature.
Top-down analysis requires a different approach and source of data.

Fides first finds bank data on the make-up of their portfolios, in terms of which sectors and countries it provides funds to, and creates a dataset which describes its exposure and earnings from investments or loans, categorised per sector-country.

It then finds a secondary database that has data on the impacts that arise globally in these sectors and in their value chains.

**Activity 3: Quantify and calculate non-valued impact for the impacts in scope**

This activity is to follow out the approach set put in activity 1 using the data collected in activity 2. To quantify and calculate non-valued impact in scope, there are a number of actions that need to be taken.

- First, your bank should build a model that is based on the approach and impact pathways that have been defined previously.
- The model can use spreadsheets for relatively simple calculations. For more complex calculations, advanced software tools may be required.
- The bank needs to check whether there is available data in the desired units. Otherwise, the model needs to be updated in order to adapt the input data to the desired units.

**Note on validation:**

The bank can challenge the model built for validation. This can also be done by an external independent party who is an expert in the field. Some things to be checked and challenged within the model are:

- Impact pathways of each impact
- Reference scenarios
- Calculation steps
- Primary and secondary data
- Assumptions and limitations
8.3 Step 7: Value impact

**Goal:** Convert impact that is previously expressed in its natural unit to single common unit, which is monetary unit.

**Activities:**

1. Choose best available monetisation factor and apply it to quantified impact.

**Why monetise impacts?**

There are several benefits to monetising impacts:\(^{12}\)

- **Express impacts in an understandable unit that is compatible with accounting systems and analytical tools.**
  
  Monetised impacts are expressed in an accounting currency that is already widely used to manage firms and investments. It is also compatible with accounting systems and analytical tools (e.g., internal rate of return and net present value) that are configured to handle currency. In addition, it helps your bank’s managers to put impact results into a business context to gain better understanding on the implication to its business.

- **Allow comparison of impacts that are in different units, and in particular compare with financial metrics.**
  
  First, by monetising impacts that are not in financial metrics, your bank acknowledges that it has impacts related, not only to financial objectives, but also sustainability (environmental and social impacts). Monetised impacts can put those impacts into perspective. For example, it is difficult to compare carbon emissions vs profit. The non-financial metrics are often not easily understood indicators, especially by non-experts. By converting impacts into a single unit, your bank can compare them accordingly and see the relative importance of impacts based on their size. For example, whether negative environmental impacts are larger than its financial impacts.

- **Enable sound decision making**
  
  When impacts are in the same unit, it enables your bank to compare them, analyse trade-offs and make sound decisions which concern your sustainability and financial goals. It increases the ability to focus on making decisions around activities / products / services that contribute to sustainable development. While monetisation is subjective, value judgements are made in any decision involving trade-offs and resource allocation. Impact valuation makes these choices explicit and transparent.

---

Activity 1: Choose best available monetisation factor and apply it to quantified impact

A monetisation factor is used to translate an impact from its natural unit into monetary unit.

Monetisation factors are in general complex factors to calculate. Therefore, it is advised that a directly available monetisation factor from a reputable source is used, for example the IWAF (published in April 2020) and CE Delft Environmental Prices, etc.\(^\text{13}\)

When choosing monetisation factors from different sources, there is a possibility that different sources provide different granularity of monetisation factors, for example, region specific, country specific, or global factor. Your bank needs to choose what is best suited for the assessment. For example, if your bank assesses a portfolio at specific country level, country specific is best suited for the assessment. In addition, different sources may also provide monetisation factors relevant for a specific year. Hence, your bank should ensure that all assessed impacts in scope are expressed in the same currency and within the same base year. This can be done by choosing proper exchange rates and inflation rates. These rates are important for consistency and comparability across multiple years.

If no factor is available for the impact being calculated, your bank could estimate the factor itself. Please refer to IWAF for the detailed valuation approach that your bank can choose if it wants to estimate the factor itself.

Once the monetisation factor for each impact has been chosen, your bank then applies the factor to the quantified impact obtained from the previous step. The valuation can be done using the following formula:

\[
\text{Monetised impact} = \text{Footprint} \times \text{Monetisation factor}
\]

*Footprint: Quantified impact in its natural unit (e.g., kg CO}_2_\)*

**Note on validation:**

Some validation checks that can be performed:

- Ensure correct secondary data is used.
- If you have defined your own factor, check the correct use of paradigm being used.
- Check that all inflation has be done correctly to ensure factors represent the correct base year.

\(^{13}\) For more sources of monetization factors, see Table A.1 in BFI- Methodology Supplement 1.
Fictional case study | Fides Bank

Fides Bank uses published monetisation factors in order to value its impacts. In cases where the impact is already financial in nature this is not necessary. For example, for the impact payment to employees no monetisation occurs.

For other impacts monetisation factors are applied.

For example, Fides Bank estimates that it emits direct CO₂ emissions of 7Kton CO₂ from its own operations. They estimate that in their value chain, there is 500 thousand Ktons of CO₂-equivalent emissions. The monetisation factor for CO₂ is 0.152 EUR/kg CO2-eq14.

Contribution to climate change from own operations is then calculated as: 7 Kton * €152,000 /kton = €1,064,000.

Contribution to climate change in the value chain is calculated as 500,000 Kton * €152,000 /kton = €76 billion.

8.4 Step 8: Attribute and aggregate impact

**Goal:** Distribute valued impacts over responsible organisations within the value chain accordingly and combine some of them into useful metrics for comparison and decision making.

**Activities:**

1. Determine attribution factor of, and apply to, each impact.
2. Aggregate attributed impacts towards impact contribution.
3. Potential further aggregation across welfare and within impact dimensions.

**Activity 1: Determine attribution factor of, and apply to, each impact**

Impact measurement and valuation in previous steps considers a wide range of impacts that affect a wide range of stakeholders. Impacts are internal if the stakeholder affected has freely agreed to the action or transaction leading to the impact, and the organisation causing the impact (insofar as it is not the organisation affected) received financial costs or benefits proportional to the impact on the affected stakeholder. Impacts that are not internal are external and are also referred to as externalities.

In reality, impacts are often partly internal and partly external. For practical purposes, impacts are classified as follows:

- Predominantly internal impacts, or internalities, if the internal component is clearly the largest part.
- Predominantly external impacts, or externalities, if the external component is clearly the largest part.
- Where feasible, impacts that have substantial internal and external components should be split into two—a predominantly internal impact and a predominantly external impact.

Therefore, it is important to determine the organisations (within your bank’s value chain) which are responsible for each impact in scope including the degree of its responsibilities (co-responsibility principle). It means that direct and indirect impacts should not be weighed the same for each impact.

- It is generally assumed that your bank has full responsibility for impacts that are internal.
- It is assumed that your bank has primary but not full responsibility for externalities it causes. Furthermore, it is generally assumed that your bank has some degree of value chain responsibility for externalities that are caused primarily by another responsible organisation in the value chain.
- When a primary responsible organisation cannot be defined, businesses are assumed to have a degree of value chain or system responsibility for externalities caused in the value chain or system.

In the context of this document, we propose to follow the attribution method as described in the Integrated Profit and Loss Assessment Methodology (IAM).

It has the following categories and they are summarised in Table 3 of this document.
• **Category 1:** consists predominantly of internal effects
  For this type of impact responsibility resides only with the business that creates them in the first place and there is no need to apportion responsibility. So, if the operations of your bank caused the impacts, it gets all of the impact. Other organisations get none. Only direct impact is taken into account in the impact contribution.

  For example, a bank’s salary payments to employees fall under predominantly internal effects. Salaries increase the financial capital of employees. This positive impact is attributed 100% to the bank, as the bank’s own operations are fully responsible for the salary payments. See the illustration below for further explanation.

  ![Illustration of attribution of predominantly internal effects](image)

  **Figure 11.** Illustration of attribution of predominantly internal effects

• **Category 2:** comprises externalities with primary responsibility and value chain responsibility
  Externalities that occur during the operations of one of the organisations in the value chain form a second category. These can be effects on health and safety for example, or GHG emissions. These impacts need to be re-attributed. In doing so, it is important that the organisation at whose own operations the impacts occur always gets the largest share. Its value chain partners should also get a share, but the sum total of the impact should be 100%.

  Practically, this can be done by attributing in two steps:
  - In a first step, 50% of the impact should be attributed to the organisation to whose operations this is linked.
  - In a second step, the other 50% of the impact should be distributed among all value chain partners (including the organisation with primary responsibility), based on their added value.

  In this category we can differentiate between two cases depending on where the impact occurs.

  **Category 2a:** The impacts occur in the operations of your bank. This means that the largest share of the impact is attributed to your bank. For example, health and safety effects of your bank’s own operations on employees, are an externality, and responsibility is partly attributed to the value chain. As the impact occurs in your bank’s own operations, primary responsibility is assigned to your bank (50%). The rest of the responsibility is split across the entire value chain and assigned...
to organisations based on their added value. See the illustration on the next page for further explanation.

**Figure 12. Illustration of attribution of externalities occurring in own operations**

**Category 2b**: The impacts occur in the operations of a value chain partner. This means that your bank receives a share of the impact that is distributed across the value chain. Here, we can again take the example of health and safety effects, and adapt it slightly. This time we do not consider effects on your bank’s own employees, but on the employees of a value chain partner. This time, the value chain partner holds primary responsibility for the impacts. The largest share of the responsibility is thus attributed to them (50%). As your bank is part of the value chain, it receives a share of the responsibility assigned across the value chain, depending on its added value. See the illustration below for further explanation.

The approach for attribution illustrated in category 2 is not the only way to attribute impacts. Especially interesting for asset managers and impact investors, the Greenhouse Gas (GHG) Protocol gives guidance on equity-based attribution.

**Figure 13. Illustration of attribution of externalities occurring in the operations of a value chain partner**
• **Category 3:** comprises effects without primary responsibility

For certain impacts at a consumer level, there is no organisation that is primarily responsible. While these impacts are clearly relevant for various supply chain actors, they cannot be assigned a primary responsibility as in Category 2. Instead, they are fully re-attributed over the value chain. For these Category 3 impacts, direct impact cannot be defined; only indirect impact contributes to the impact contribution.

**Table 3.** Summary of responsibility of actors in the value chain based on impact category

<table>
<thead>
<tr>
<th>Type of impact</th>
<th>Responsibility</th>
<th>Attribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 1: Predominantly internal effects.</td>
<td>Resides only with the business; no need to re-distribute.</td>
<td>No re-attribution over value chain.</td>
</tr>
</tbody>
</table>
| Category 2: Externalities with primary responsibility and value chain responsibility. | Shared among value chain partners. Most responsibility with the organisation where the impact actually occurs. | Impact equivalence:  
- 50% to organisation at which the impact initially occurs.  
- 50% re-attributed over value chain, including bank. |
| Category 2a: Externalities with primary responsibility at own operations. | Primary responsibility lies with the bank. For externalities, the value chain is partly held responsible. As the primary responsibility lies with the bank, most impact is attributed here. |  
- 50% to the bank.  
- 50% re-attributed across value chain, including bank. |
| Category 2b: Externalities with primary responsibility in value chain. | Primary responsibility lies with value chain partner. As the bank is part of the value chain, it is also partly held responsible. Most impact is attributed to the value chain partner. |  
- 50% to the value chain partner.  
- 50% re-attributed across value chain, including bank. |
| Category 3: Effects without a primary responsibility. | Shared among value chain partners. Not possible to identify a specific partner to give primary responsibility to. | Fully attributed over value chain. |

As specified in the previous section, the impact for Category 2 and 3 impacts should be (re-)attributed over value chain partners. The principle of co-responsibility indicates that this should be done in line with the degree to which organisations are responsible for the impact. A pragmatic implementation links the degree
of influence of an organisation in the value chain to value added\textsuperscript{15} (or added value): a large share of added value in a value chain represents a large degree of influence. The advantage of using this factor is that this is a well-known and well-documented indicator.

During this implementation, value chain impact is considered as indirect impact. Full value chain impact is re-distributed across the various organisations (including those that contribute to it in the first place). Thus, value chain impact is multiplied by the share of value added by the organisation under review (your bank) to the value added by all organisations that contribute to the indirect impact.

Once you know the degree of influence of each impact (both absolute and marginal), and the added value within the value chain, the following formula for each impact in each category can be applied when calculating the attributed impact. Please refer to the attribution principles outlined in the Conceptual Framework for Impact-Weighted Accounts when applying attribution concept.

\textbf{Fictional case study}

Fides Bank now attributes impact based on the principle of added value.

Fides Bank calculates the added value ratio of own organisation and value chain as 60%.

Fides identifies which attribution category each impact belongs to.

Well-being from employment, gender discrimination and contribution to climate change from own operations, both belong in category 2a. Thus the attribution calculation applied is as follows:

For own operation impact, attribution factor would be: 50% + 50% of added value (60%) = 80%.

- Attributed contribution to climate change own operation: €1 million * 80% = € 800,000

Impacts that arise in the value chain, such as the ones from Fides’ lending portfolio, belong in attribution category 2b. The attribution calculation is then: 50% of added value (60%) = 30%

- Attributed contribution to climate change in the value chain: €76 billion * 30% = € 22.8 billion

This concept is then applied to other impacts in own operation and in value chain.

\textsuperscript{15} “Value added reflects the value generated by producing goods and services, and is measured as the value of output minus the value of intermediate consumption. Value added also represents the income available for the contributions of labour and capital to the production process” - OECD (2018), National Accounts of OECD Countries.
Activity 2: Aggregate attributed impacts towards impact contribution

Once your bank has calculated attributed impacts, some of them can be aggregated towards impact contribution.

Aggregation of impact contribution can be:

- The **absolute impact contribution** is a (linear) combination of direct and indirect absolute impact.
- The **marginal impact contribution** is a (linear) combination of direct and indirect marginal impact.
- The **total impact contribution** is a (linear) combination of all four types of impact.

**Fictional case study**

From the case study in the previous step, Fides Bank reports the following attributed impact:

- Attributed contribution to climate change own operation: € 800,000.
- Attributed contribution to climate change in the value chain € 22.8 billion.

This results in Fides Bank’s total contribution of climate change impact to nature and its beneficiaries’ stakeholder group:

- Attributed contribution to climate change own operation + Attributed contribution to climate change in the value chain = € 800,000 + € 22.8 billion = € 22.88 billion EUR.

This concept is also applied to other impacts of Fides Bank.

Activity 3: Potential further aggregation across welfare and within impact dimensions

Aggregation suggests the impact information is simplified and becomes more understandable without altering the meaning. Aggregation can happen at different levels. Depending on its needs, the organisation can choose the way to present its impact information by selecting one or more of the following:

1. **Aggregating sub-indicators that belong to an impact**

An impact can have different sub-indicators. For example, contribution to climate change impact has three sub-indicators: scope 1, 2 and 3 of greenhouse gas emissions. These sub-indicators can be aggregated to an impact level – contribution to climate change. *Note that the aggregated impact that is presented should be the attributed impact.*

2. **Aggregating impacts from the same impact category within a welfare dimension**

Examples that can be aggregated into environmental impacts are air pollution, contribution to climate change, and water pollution. Banks should also still present the value per impact in its impact-weighted accounts. Impact from different welfare dimensions should not be aggregated. For example, child labour (impact
Welfare dimensions

A welfare dimension is a fundamental concept that a decision-maker considers to be a valuable criterion in decision-making.

Two key welfare dimensions that are often considered are wellbeing and respect of rights.

Wellbeing as a welfare dimension is commonly used in impact assessment methodologies and frameworks, explicitly or implicitly. Well-being is a broad notion related to the satisfaction of needs and/or preferences at the individual or collective level. Examples of impacts that fall within the wellbeing welfare dimension are:

- Salaries and other comprehensive benefits
- Wellbeing from employment
- Client value of products and services
- Profit
- Value to society of a better trained workforce

Respect of rights is another important welfare category. Remediating harm related to non-observance of rights is at the core of the true pricing principles (True Price Foundation & Impact Economy Foundation, 2020). Examples of impacts that fall within the respect of rights welfare dimension are:

- Occupational health and safety incidents
- Child labour in the value chain
- Environmental pollution
- Depletion of scarce materials
- Contribution to climate change

3. Aggregating impact per types of impact

This yields six values: three absolute impact and three marginal impact (direct impact; indirect impact – value chain; indirect impact – system).

4. Aggregation of types of capital or stakeholders

Impact can be aggregated per type of capital and per stakeholder. This is especially useful for steering, future monitoring of impact and evaluating organisation’s strategy.

5. Aggregation at organisational level.

This is presenting the sum of all the impacts. However, it should still adhere to aggregation principle outlined in Chapter 2. Organisations can sum positive and negative impacts, as long as negative impacts
are reported separately. They should not net positive impacts with negative externalities such as air pollution or human rights violations.

This is especially useful when/for comparing impacts with different organisations; with the same organisation from a different period of time; and with the ideal situation that your bank wants to achieve.

After the impacts are attributed and aggregated accordingly, impact information needs to be compiled in the form of the elements of impact-weighted accounts.

**Practical challenges**

While aggregation can be useful, it also bears multiple risks. It is therefore important to identify when it is beneficial to aggregate impacts, and when it is not.

Benefits of aggregation:

- Facilitates decision making and readability by simplifying the presentation of results. For example, in some cases environmental impacts such as soil pollution, water pollution and air pollution can be aggregated to environmental pollution. Especially when many impacts are included in an assessment, this can make the information presented to the reader more digestible. When aggregating impacts to simplify overviews, it is always important to keep the focus of the report in mind. A report that is focused on environmental impacts, might benefit from keeping environmental impacts disaggregated.

Risks of aggregation:

- Over aggregation – a single total impact – can lead to the idea that it is acceptable to inflict harm on one stakeholder to benefit others. This also poses the risk of greenwashing when negative impacts are hidden or netted with positive impacts.
- Loss of granularity needed to adequately inform decision making. Breakdowns into different capitals or stakeholders as well as direct and indirect impacts can be useful to identify drivers of impact. Aggregation can hide important impact drivers and limit the information available to the decision maker.
- Incorrect aggregation may lead to double counting.

Due to the risks associated with aggregation it can be useful to show both aggregated and disaggregated views. This ensures that risks of aggregation are minimized.
Glossary

The glossary defines key terms and concepts in impact assessment and valuation.

**Activity**

The activity of an organisation includes actions taken or work performed by the organisation in the timeframe.

**Reference activity**

A reference activity is a specified counterfactual activity to the activity undertaken by the organisation that would have occurred in the chosen timeframe if the organisation had not undertaken that activity.

**Impact**

Impact is a change in a valuable and measurable outcome with respect to a reference scenario during a given timeframe. Impact can be both positive or negative and intended or unintended (IMP, n.d.).

- **Absolute impact** is the impact in which the activities of the organisation under consideration are compared to a reference scenario in which no activities occur.

- **Marginal impact** is the impact in which the activities of the organisation under consideration are compared to a reference scenario in which alternative activities occur. In particular, these alternative activities are those that can be expected to occur were the organisation absent.

- **Direct impact** of a specific organisation in scope is the impact that follows from the own operations of that organisation.

- **Indirect impact** is the impact that arises outside of the organisation itself as a result of the organisation’s actions; where the organisation in scope has a form of direct or indirect influence on the occurrence and/or size of that impact.

  - **Indirect impact within the value chain** (or ‘value chain impact’) is the impact that is generated somewhere in the organisation’s value chain; either upstream or downstream.

  - **Indirect impact within the system** (or ‘system impact’) is the impact that is generated outside of the organisation’s own value chain.

**Impact monetisation**

Impact monetisation is the process of translating an impact that is expressed in a non-monetary unit into an impact that is expressed in a monetary unit.

**Impact valuation**

Impact valuation is an assessment of the normative desirability of an impact from the perspective of a stakeholder in a common quantitative unit that reflects that impact’s value to that stakeholder. The common unit is often monetary.
A valued impact is an impact expressed in a quantitative unit that reflects the normative desirability of an impact from the perspective of a stakeholder. In the context of this document, valuation refers to expression in monetised form.

Welfare dimension
A welfare dimension is a fundamental concept such as wellbeing, respect of rights, equality or fairness that a decision-maker considers valuable and uses as highest-level criteria in decision-making.

Impact pathway
An impact pathway is a quantifiable chain of effects and counterfactual effects linking a specific activity of an organisation to its (non-valued and valued) impact.

Actual scenario is the chain of realised and/or expected effects of inputs, outputs and outcomes as a result of the reference activity.

Reference scenario is the counterfactual chain of effects of inputs, outputs and outcomes as a result of the reference activities.

Input(s) are the financial, human, manufactured, natural and other resources used in the activities of the organisation over a chosen timeframe. Technically, an activity’s input is a direct effect of an activity of the organisation that occurred over a period chosen in the timeframe and that constitutes a voluntary and positive capital change to the organisation.

Output(s) are the direct results (financial capital, goods or services, material resources or externalities) of the activities that occur over a chosen timeframe. Technically, an activity’s output is a direct effect of an organisation’s activity that occurred during a period chosen in the timeframe and that is not an input.

Outcome(s) are the direct or indirect welfare effects on stakeholders of an activity that occurred over a chosen timeframe. An outcome can be caused by inputs or outputs.

Materiality
An impact is material if it affects the future earnings of the organisation or if it affects the welfare of one or more (external) stakeholder groups.

Value chain
The value chain of an organisation is the combined upstream, downstream and own operations activities used to produce all products and services to which the organisation contributes.

Upstream operations are the activities of suppliers, including purchased energy.

Own operations are all the activities over which the business has direct control.

Downstream operations are the activities relating to further processing, purchase, use or disposal of any products or services produced by the organisation.