ACCA Think Ahead

PROFESSIONAL ACCOUNTANTS CHANGING BUSINESS FOR THE PLANET

A short guide to natural capital management for **performance managers**

Contents

REPORT SERIES: **2** of 4

About ACCA

ACCA is the Association of Chartered Certified Accountants. We're a thriving global community of 227,000 members and 544,000 future members based in 176 countries that upholds the highest professional and ethical values.

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This guide is derived from ACCA's desk-based research and information from our contributors, who have provided valuable insights through their participation in the roundtables and interviews that we conducted as part of this project. In the longer version of this guide, we have provided many examples and links to other organisations with natural capital management expertise to support readers further in connecting to more detail; some of these are included in this shorter guide. In providing such links, ACCA does not endorse any commercial activities associated with these organisations.

1. Introduction and executive summary

The introduction, part one of this series (ACCA 2020a), established the call for businesses and their leaders to execute strategies that manage natural capital better (see Figure 1.1).

The loudest call comes from nature, letting us know through scarcity and impaired quality of natural capital that the planet cannot sustain our demands. Society, policymakers and investors hearing this call are demanding better management of all capitals used by business (Eccles 2020). Therefore you, the performance manager, must provide performance and management accounting insight for decision-making by leadership, managerial and operational business functions, helping them design and execute successful natural capital strategies that connect to external reporting (see Box 1.1).

Doing this makes you a valued business partner (see Figure 1.2), a professional accountant who employs much-needed forward-looking integrated thinking, connecting and balancing the trade-offs between the material capitals (see Figure 1.3) required for risk management and opportunity realisation.

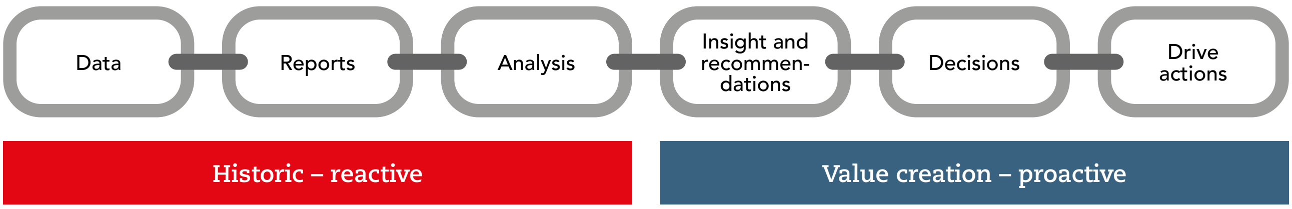
FIGURE 1.1: Four strategic options for managing natural capital

Source: ACCA 2020a

Box 1.1: Functions of the performance manager

- **Directing**: strategic option development and selection, investment appraisal and process design
- **Planning**: budgeting and costing
- **Control**: setting and monitoring metrics to measure strategic performance and act as risk mitigation and opportunity realisation intervention triggers.

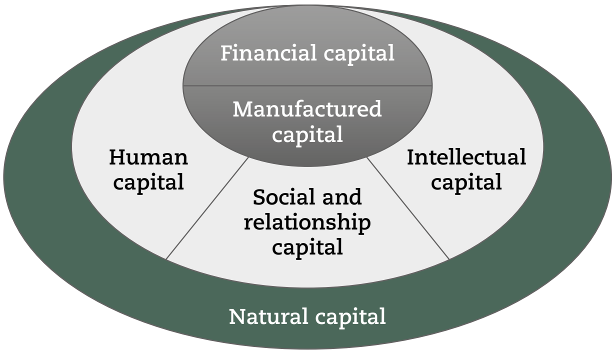
FIGURE 1.2: The six stages of business partnering



Source: ACCA and PwC 2020

> THE LOUDEST CALL COMES FROM NATURE, LETTING US KNOW THROUGH SCARCITY AND IMPAIRED QUALITY OF NATURAL CAPITAL THAT THE PLANET CANNOT SUSTAIN OUR DEMANDS.

FIGURE 1.3: The interconnected multi-capitals



Source: Incite 'Sustainability 2.0: A Guide to Competing in a Changing World'

This is one of many ways to depict the capitals. Typically, financial and manufactured capitals are the ones organisations most commonly report on. The IIRC takes a broader view by also considering intellectual, social and relationship, and human capitals and natural capital, which provides the environment in which the other capitals sit.

Product life cycle assessments (LCA) provide a mechanism for supporting the integrated thinking required for natural capital management. This guide has modified the standard LCA to give better support to performance and management accounting functions. The key steps are as follows.

STEP 1: Determine the connections required between the LCA and performance management.

STEP 2: Determine the products on which to conduct the LCA.

STEP 3: Determine the scope of the product LCA, natural capital dependency and impact to be measured.

STEP 4: Collect the data for the product LCA, and for inclusion in dependency and impact metrics.

STEP 5: Prepare the product LCA metrics for use in performance management.

We will help enhance your natural capital scientific literacy, appreciation of dynamic materiality, and identification of information system needs.

We hope that this guide inspires and supports your integrated thinking in your efforts to create sustainable business. For more detailed explanations, examples and links to sources of guidance, please refer to the full version of this guide.

2. Integrating natural capital impacts and dependencies with performance management

Proactive value creation insight is the result of integrated thinking on the costs, benefits, risks and opportunities associated with the material capitals used and changed by the business. In this section, we address how to determine the integrated capitals insight requirements of your business, before moving on to the approach you should take.

2.1 Understand the business need for natural capital performance management

Making decisions for sustainable value creation is rarely achieved through intuition but borne from diligent collection and performance management evaluation of data on the interconnected capitals. Examples of this evaluation are provided in sections 2.3 and 2.4.

The business leaders' guide (ACCA 2020b) highlights that decision making on natural capital issues needs to happen across the organisation, so within leadership, managerial and operational functional decision-making groups, such as the board, finance, organisational risk management and production process groups. Appreciating the terms of reference for each of these groups will help you understand the decisions each of them needs to make, and therefore the integrated capitals performance management insight requirement.

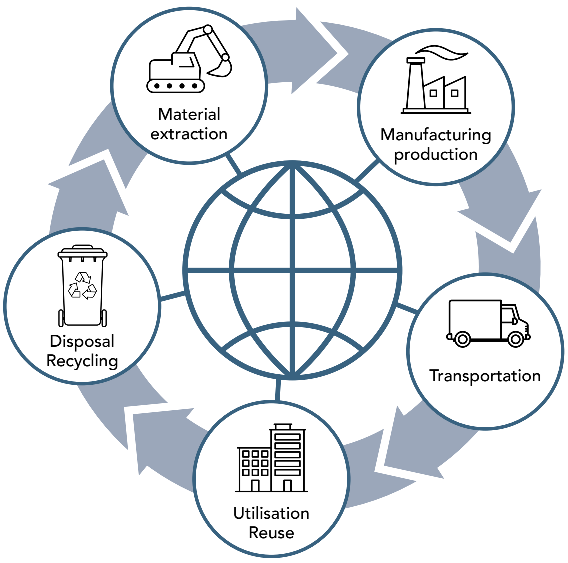
Your insights should:

- include a fair balance of qualitative and quantitative indicators across the capitals
- consider the short and the long term
- address the dynamic nature of materiality, taking into account how materiality changes over time or in response to specific events for your business and stakeholders views and actions, such as COVID-19 and Brexit increasing the materiality of supply chains (Eccles 2020)
- relate to progress against strategy, risk, business forecasting and governance systems, etc (IIRC 2019)
- be able to connect to what can be relevantly and reliably reported externally.

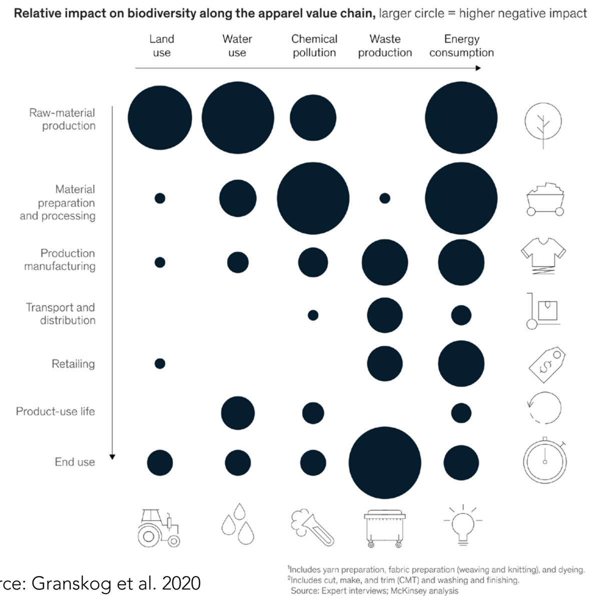
2.2 What is a product life cycle assessment (LCA) and why conduct one?

Natural capital management requires appreciation of the business model's natural capital inputs and outputs and the interconnections with the other capitals (see Figure 1.3). An LCA involves measuring the natural capital used in the value and supply chain and provides the frame to gain this appreciation (see Figure 2.1).

FIGURE 2.1: The produce life cycle and worked example



Source: Adapted from NIST



Source: Granskog et al. 2020

The product life cycle for the clothing sector has been assessed, and indicates that a strategy for managing natural capital should focus on:

- raw material production – land, use of water and energy
- raw material processing – chemicals and energy
- end use – waste.

It is for you to define what is meant by the 'product', and for the purposes of this guide it should be taken as including both goods and services.

Product LCAs ensure compliance with policymakers' requirements and help build brand and market.

2.3 How to conduct an integrated performance management product LCA

There are five steps in an integrated performance management product LCA.

STEP 1: Determine the connections required between the LCA and performance management.

STEP 2: Determine the products on which to conduct the LCA.

STEP 3: Determine the scope of the product LCA, natural capital dependency and impact to be measured.

STEP 4: Collect the data for inclusion in the identified metrics.

STEP 5: Prepare the product LCA metrics for use in performance management activity.

STEP 1: Determine the connections required between the LCA and performance management

This step will help you determine the data connections between the product LCA and performance management. You should think about the following questions.

- Where is natural capital information needed? So, consider which planning, directing and controlling functions will execute the organisations' 4Rs strategy (see Box 1.1).
- What measures will need to be used and how will they need to be presented? Your findings from completing the activities in section 2.1 will guide what is needed for each decision-making group, including the level of detail and whether to use monetary values, banding or rating scales for natural capital measures. Step 5 explores the practicalities of doing this.

STEP 2: Determine the products on which to conduct the LCA

Businesses with more than one product offering may need to prioritise the products on which to conduct the LCA. Consider:

- products deemed strategic to achieving business purpose
- grouping products that use similar capitals (resources) and processes
- products that have natural capital impacts such as by:
  - emitting gases linked to climate change and pollution, for example CO_2
  - making significant change to land or water use, such as monocultures
  - introducing invasive species or being linked to waste
  - creating light and noise pollution
- products where LCAs have been made publicly available, therefore providing learning and data access.

STEP 3: Determine the scope of the product LCA, natural capital dependency and impact to be measured

You need to select the natural capital measurement indicators that will address the scope of the product LCA, dependency, impact and boundary (see Figure 2.2).

CONSIDER WHICH PLANNING, DIRECTING AND CONTROLLING FUNCTIONS WILL EXECUTE THE ORGANISATIONS' 4Rs STRATEGY: HOW MUCH NATURE HAVE YOU RESTORED, REMOVED OR REDUCED YOUR IMPACT?

FIGURE 2.2: Definitions of scope, dependency, impacts (outputs, outcomes) and boundary

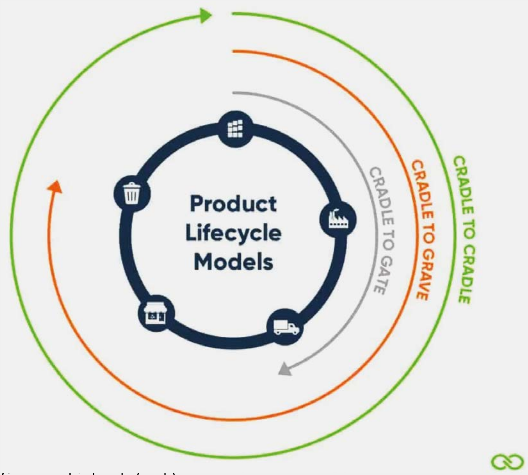
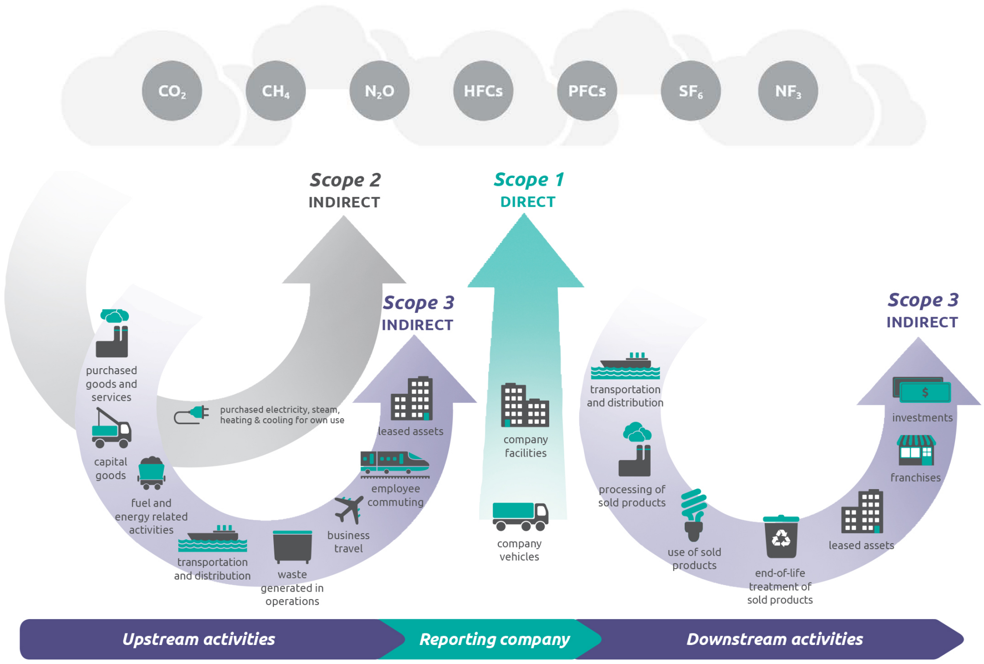
TERM	DEFINITION	EXAMPLES AND CONSIDERATIONS
Scope	The extent (start and end points) to which the organisation intends to recognise, measure and potentially manage natural capital. The scope, start and end points could be: ■ **cradle** (raw materials for your product or your waste as a raw material for another product) ■ **grave** (end use for your product) ■ **gate** (organisation boundary, the physical entry or exit)  Source: Liebsch (n.d.)	■ 'Cradle to cradle' is the most complete, therefore likely to yield the most opportunities for identifying natural capital management strategies ■ Engagement with external stakeholders will be required to acquire the data to support more complete LCAs
Dependency on nature	The need to use nature as raw materials or in processes across the life cycle	Use of land and water together with their flora and fauna (ACCA and NBA 2013)
Impact on nature	The output to nature, ie what is put into the environment or the outcome for the environment, specifically the positive or negative change to nature	■ Outputs include chemical emissions and waste products ■ Outcomes are the impacts, including their significance for the existence and/or quality of nature and societal well-being, for example flora and fauna lost owing to outputs such as felled trees or toxic emissions to water that reduce fish stocks and/or make water undrinkable ■ Outcomes are typically what interest stakeholders most and indicate precisely the aspect of nature that needs a natural capital management strategy, but are usually more difficult (although not impossible) for accountants to measure, because they usually need science-based measures (IIRC 2013)
Boundary	The extent to which nature will be considered: ■ **Scope 1** – direct impacts owned or controlled by the business ■ **Scope 2** – indirect impacts from energy consumed by the business in the production of goods and services ■ **Scope 3** – all other ancillary impacts arising from the organisation's value chain	■ **Scope 1** – land, water plus flora and fauna ■ **Scope 2** – emissions to air, soil and water from the fossil fuels used to create the energy purchased ■ **Scope 3** – emissions associated with other resources or processes used by the business in production or its disposal *Please see Figure 2.3 which illustrates this.*

FIGURE 2.3: Overview of GHG Protocol scopes and emissions across the value chain



Source: World Resources Institute and WBCSD 2013

Scope

The main output from this stage is the product life cycle map (see Figure 2.4), from which you will define the scope of the product LCA, in other words the aspects of your business processes for which you will determine natural capital impact and dependency.

In making this decision, consider:

- where the most likely opportunities may be for managing natural capital efficiently
- data needs, where data gaps may exist at each stage of the product life cycle in a cradle to cradle scenario, how they could be filled, including through engagement with your external stakeholders up and down the supply chain.

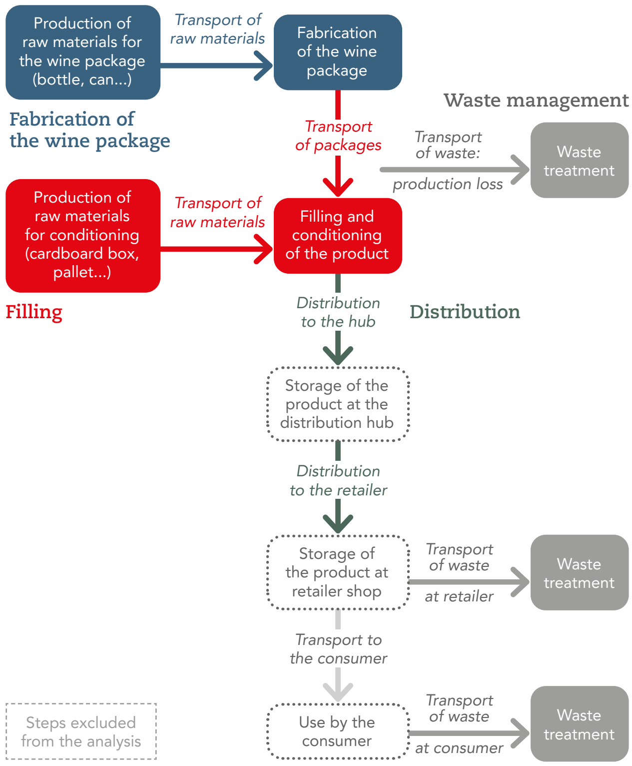
Include in the scope of the product LCA the stages that achieve a fair balance between data gathering and the ambitions of the strategy. This approach is equally relevant for impact, dependency and boundary.

Dependency, impact and boundaries

You need to determine the metrics to be measured for planning, directing and control purposes. These metrics cover dependencies (inputs), impacts (outputs or outcomes) and boundary (level of detail relating to impacts) (see Figure 2.2). Step 4 collects the data for inclusion in this.

FIGURE 2.4: Tetra Pak wine packaging scope example

Tetra Pak scope for their product LCA is cradle (production of raw materials) to gate (boxed wine)



Source: Adapted from Tetra Pak

Select metrics that satisfy the following criteria.

- Measure the most important contribution from or impact to nature. For dependency, this could be the biggest use of or most easily available substitutes to using natural capital. This will help identify strategic or tactical options (reduce, remove, restore and reimagine success).
- As a minimum, provide quantitative dependency and impact outputs supported by qualitative impact outcomes (see Figure 2.2), for example litres of wastewater or kilos of CO_2 emitted, from which the outcome should be described, such as loss of flora and fauna due to contaminated environments or climate risk.
- Simplify the boundary, by focusing on Scopes 1 and 2, at least for initial LCAs (see Figure 2.2). Scope 3 requires a deeper dive for information and so can be included in continual improvement iterations of the product LCA.

Finally, non-financial reporting standards and frameworks are a great source of guidance, helping identify specific dependency, impact and boundary metrics (see Figure 2.5). Start by identifying the main natural capital issues for your product LCA by exploring the materiality map developed by the Sustainability Accounting Standards Board (SASB) for your industry, then connecting to other initiatives, such as the Global Reporting Initiative (GRI) which includes guidance related to selecting dependency and impact output metrics extending to outcomes, so beyond SASB guidance.

FIGURE 2.5: Potential impacts and measures

Theme	Expanded Metrics and Disclosures	Sources
Climate Change	**Science-based target to reduce GHG emissions** Define and report progress against a science-based target to reduce GHG emissions.	SBTi
	TCFD-aligned reporting Enhance TCFD aligned reporting with financial metrics.	TCFD
	Impact of greenhouse gases Report wherever material along the value chain: Valued societal impact of greenhouse gas emissions.	NCP, ISO 14008
Nature Loss	**Impact of land use** Report wherever material along the value chain: Valued societal impact of use of land and conversion of ecosystems.	NCP, ISO 14008
Fresh water availability	**Impact of fresh water consumption** Report wherever material along the value chain: Valued societal impact of water consumption.	NCP, ISO 14008
Air pollution	**Fine particulate matter** Report wherever material along the value chain: Tonnes of PM2.5 emitted in urban areas.	GRI (305-7), SASB (120a.1)
	Impact of air pollution Report wherever material along the value chain: Valued societal impact of air pollution.	NCP, ISO 14008
Water pollution	**Nutrients** Report wherever material along the value chain: Tonnes of phosphate and nitrogen used or produced.	Adapted from: GRI (303-1)
	Impact of water pollution Report wherever material along the value chain: Valued societal impact of water pollution, including excess nutrients, heavy metals and other toxins.	NCP, ISO 14008
Solid waste	**Single use plastics** Report wherever material along the value chain: Tonnes of single-use plastic disposed of.	New Metric
	Impact of solid waste disposal Report wherever material along the value chain: Valued societal impact of solid waste disposal, including plastics and other waste streams.	NCP, ISO 14008
Resource availability	**Resource circularity** Tonnes and % of circular inflow / outflow.	WBCSD & KPMG Circular Transition Indicators

Source: WEF 2020: 16

STEP 4: Collect the data for inclusion in the identified metrics

Once the metrics are identified, you will need to gather data for inclusion in them.

Your organisation's process and costing datastores should hold most of the dependency and output Scope 1 impact data. Additional data, especially that relating to other scopes, can be obtained as proxy measures, for example from organisations in your industry that employ sustainability reporting and national databases such as the ones held by the OECD.

When using proxy measures, take care to adjust them to reflect your local environment or use, and always communicate to stakeholders the limitations of using proxies.

Many impact outcome metrics employ science-based metrics and data (CISL 2020), for example changes in volume and variety of fauna and flora (outcome) due to hectares of forest felled or emissions to air (output), water and soil (output) (see Box 2.1). You may need to connect with natural capital specialists or their work. The Biodiversity Impact Metric (BIM) defines the change in nature, including its significance, therefore helping identify the key geographical areas with biodiversity change risk. In the next step we outline how you can use it in performance management.

STEP 5: Prepare the product LCA metrics for use in performance management activity

The result of Steps 1 to 4 is a set of metrics, but they are all expressed in different ways, for example kilos of CO_2, litres of toxic wastewater, BIM, which makes it difficult to fully appreciate the implications for thinking about and decision-making on the integrated capitals. These measures will require some conversion to aid comparison, or visualisation similar to that shown for the value chain in Figure 2.1 above and environmental profit and losses (see Figure 2.6: Puma eP&L).

Box 2.1: Science based measures for nature loss and worked example

Biodiversity Impact Metric = Land area x Proportion of biodiversity lost x Biodiversity importance

The BIM calculates the change to nature, including its significance, so it measures not only the loss or gain of flora and fauna but also its importance to the locality, therefore providing an indication of where the Key Biodiversity Areas (KBA) are located. The higher the BIM, the more problematic is the outcome for nature.

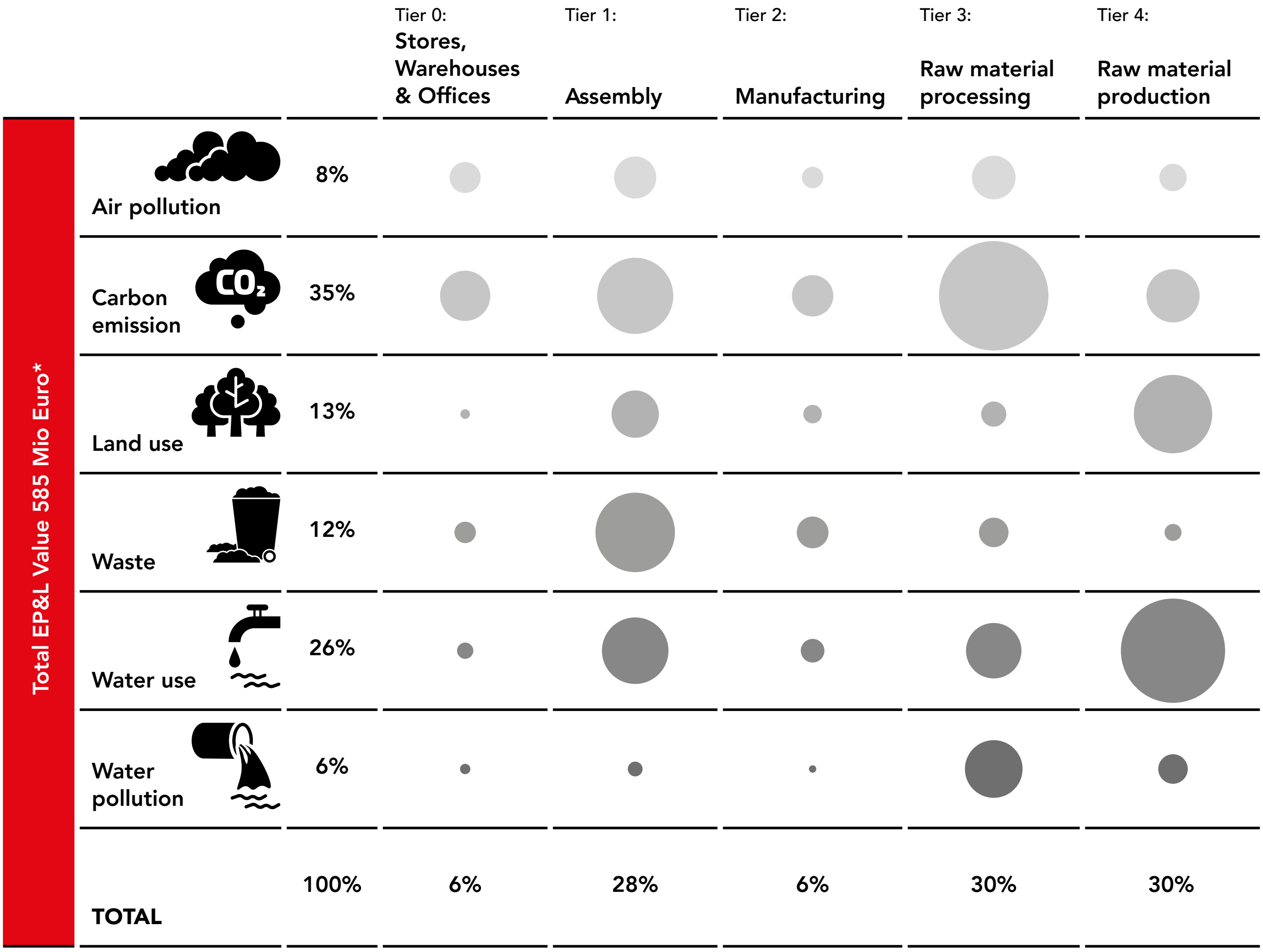
Data relating to land area will come from the organisation's datastores.

Biodiversity lost and its importance are both scientific measures and are obtained from national databases.

- The proportion of biodiversity lost is expressed as a 0% to 100% scale, and based on the type of land use, for example farming including kind (organic, monoculture, intensive, etc), buildings, depositing waste. The closer to 100% loss, the bigger the problem.
- The relative biodiversity importance is the balance of the variety and rarity of species in the location. The bigger the value, the bigger the problem.

Source: CISL 2020

FIGURE 2.6: Puma eP&L



* without value-channel footwear

Source: Adapted from PUMA 2018

Monetary values

As a professional accountant, your first instinct will be to monetise metrics, but before doing so consider whether monetisation is necessary (see Figure 2.7).

If you decide to monetise natural capital dependencies and impacts (CO_2, toxic waste, BIM) then one of the following methods may be of use:

- Market value of:
  - acquiring the natural capital again
  - fixing the negative impact on nature resulting from business activity, using prices set by others, such as governments, some of which set a price per kilo of carbon or nature lost.
- Non-market valuation including:
  - cost-basis:
    - historical cost
    - avoided damage, for example, value of avoided water treatment costs because the organisation has put in place system to limit emissions to soil and water
    - replacement cost.
  - Value gained from use, being the proportion of total revenue derived from nature's contribution, where the proportion is the importance of nature relative to the capitals used to generate value.
  - Revealed or stated preference, being the amount the organisation is willing to pay in a hypothetical situation to fix a problem, for example to reverse the negative impacts of a toxic leak of effluent to the sea.

Once you have selected your monetisation approach, to determine the impact multiply the metric by the unitised monetary value.

Finally, if monetisation is unnecessary, then an alternative such as a banding and rating system can work well.

Banding scales and rating systems

Here, the natural capital metric measure or issue is allocated:

- to a band, for example CO_2 emissions less than 'x' grams, between 'x' and 'y' grams, or over 'y' grams. This is useful if when setting targets for managing specific impacts across the product life cycle.
- a rating, for example red, amber and green ratings. These work well when used as compliance-risk indicators, addressing likelihood versus impact, signposting availability of alternatives or ease of switching away from a natural capital resource.

FIGURE 2.7: Examples from A4S of considerations for when and where to use monetisation

TYPE OF MEASURE	WHEN USEFUL?
Qualitative	■ Initial consideration of issues or where you wish to cover a large number of issues ■ Detailed data is unavailable
Quantitative	■ Data is already being collected, eg water usage through bills ■ Comparison against targets, eg corporate carbon reduction target ■ Investigating net impacts ■ Impacts or risks have a strong ethical or political dimension ■ Areas where severe, long term or irreversible impacts are likely and an absolute level therefore needs to be set
Monetary – Shareholder value	■ Developing a business case for an investment decision ■ Making trade offs between different issues, eg carbon / water / jobs or across different geographies from a purely financial or value at risk perspective ■ Assessing the financial impact of risks and opportunities ■ Communicating the potential market value of an opportunity or risk to your investors
Monetary – Societal value	■ Making trade offs between different issues or across different geographies taking into account the full value chain risks and impacts ■ Understanding potential future risks ■ Focusing on 'license to operate' or reputational benefits ■ Projects have significant community benefits ■ Communicating with stakeholders ■ Maximising positive impact for all stakeholders including the environment

Source: Adapted from A4S 2019 – updated

2.4 Including product life cycle findings in performance management

Monetised values can be integrated directly to standard directing, planning and control performance and management accounting (see Box 1.1), whereas bandings and rating systems can provide an extra layer of insight.

Qualitative information is also very important and, as a minimum, should be provided to aid understanding of the quantitative measures. A few examples have been provided to help stimulate creative thinking on how you may integrate natural capital metrics.

Directing and planning

Strategic option selection and investment appraisals considered here can also be applied to other aspects of directing and planning.

Integrated thinking necessitates making connections between the capitals and in relation to the business decision-making issue, whether strategic goals, options development and selection (see Figure 2.8), or risk management (IIRC 2019). The Leaders' guide (ACCA 2020b) provides an example of this on page 17.

In this instance, monetisation of natural capital impacts and dependencies, including strategic commitments, is useful because monetary values can be included in costings and investment appraisal systems (see Box 2.2).

Other uses of natural capital metric measures include the following.

- Supplementing traditional investment appraisal calculations, such as net present value with additional alternatives, where natural capital cashflows not yet committed are included to provide a complete sense of potential cost.
- Setting ratings or banding thresholds or targets that act as a condition to be met for a specific directing or planning option to proceed.

Control

Metrics can be used as control indicators, using the example of the painkiller packaging (see Box 2.2), when CO_2 emissions breach a set target for a production stage, then that stage would subject to investigation to understand and fix the breach.

FIGURE 2.8: The natural capital integrated thinking matrix

Source: ACCA 2020c

Box 2.2: Example of integrating natural capital into costing appraisal systems

Integrated capitals analysis has been conducted on packaging for an over-the-counter painkiller, using LCA techniques. The analysis showed that the CO_2 emissions from the material-components (packaging) are higher than those from production activity (Figure 2.9). The CO_2 breakdown, along with total cost analysis, revealed that there were opportunities to reduce both CO_2 and product costs.

Data analytics modelling for three different scenarios was conducted:

- reducing the box weight by 10%
- increasing the packaging density (to save box and blister material)
- relocating the packaging production to another country (Figure 2.10).

The best outcome results from increasing packaging density, reducing costs by 3% (financial capital) and CO_2 emissions by 5% (natural capital), although it does increase production time by 5%, hence potentially increasing employee time because modifications are needed for production processes (human and manufactured capital).

Source: McKinsey & Company 2020 (Figure 2.9 and 2.10)

FIGURE 2.9: Original CO_2 analysis

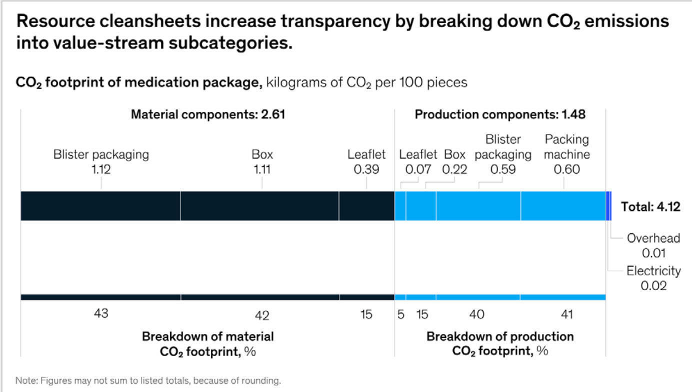


FIGURE 2.10: Three strategies for carbon abatement of medication packaging

Cost impact, € per 100 pieces		Reduce box weight by 10%		Increase tablet density per package		Relocate production	
	Original	New	Change	New	Change	New	Change
Overhead	0.32	0.32	0.00	0.32	0.00	0.18	−0.14
Production	1.38	1.38	0.00	1.40	0.03	1.11	−0.27
Material	1.38	1.31	−0.07	1.27	−0.11	1.37	−0.01
Total	3.08	3.00	−0.07	2.99	−0.09	2.66	−0.42
Net change			−2.4%		−2.8%		−13.6%

CO_2 impact, kilograms of CO_2 per 100 pieces		Reduce box weight by 10%		Increase tablet density per package		Relocate production	
	Original	New	Change	New	Change	New	Change
Overhead	0.01	0.00	−0.01	0.01	0.00	0.01	0.00
Production	1.48	1.47	−0.01	1.51	0.03	1.75	0.27
Electricity	0.02	0.02	0.00	0.02	0.00	0.04	0.02
Material	2.61	2.50	−0.11	2.38	−0.22	2.61	0.00
Total	4.11	4.00	−0.12	3.92	−0.19	4.41	0.29
Net change			−2.8%		−4.7%		7.1%
Abatement cost, € per metric ton of CO_2			−583		−474		No abatement

Note: Figures may not sum to listed totals, because of rounding.

3. Implementation considerations for the performance manager

Connecting LCAs with the performance management activities of directing, planning and control is only possible with the appropriate information systems and processes, and capable people.

3.1 Information systems

The quality of integrated thinking is dependent on the quality of information systems and connectivity of data (see Figure 3.1) (IIRC and <IR> Technology Initiative 2016).

The design of information systems should consider the points raised in Figure 3.2.

3.2 Process

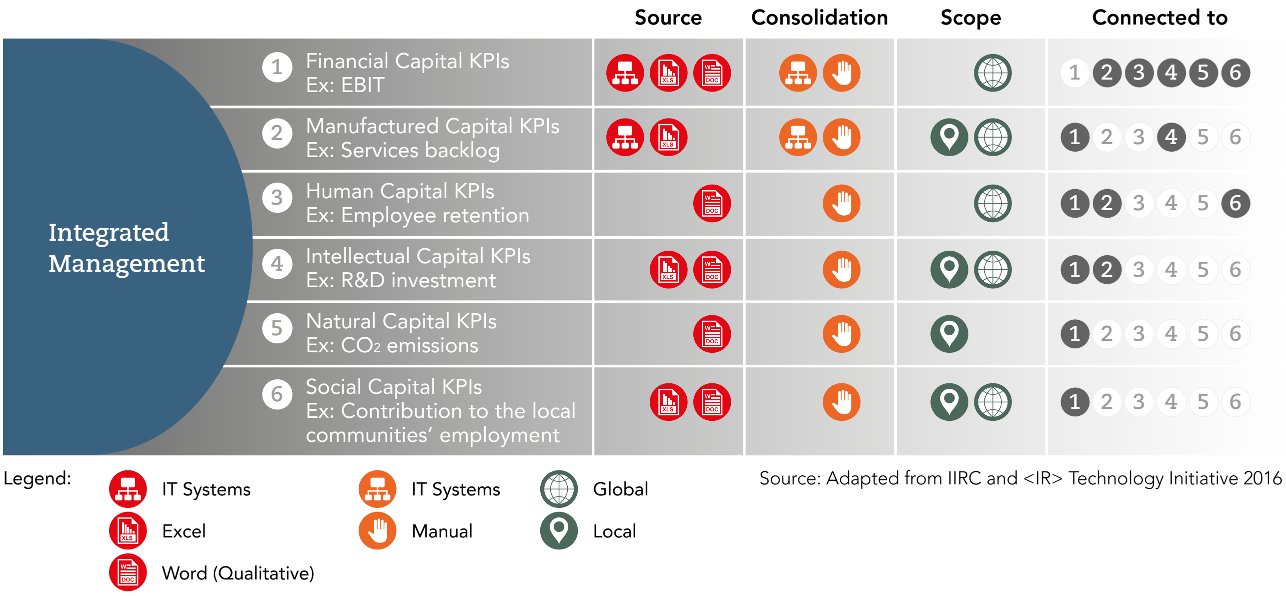
Integrating natural capital with performance management should be an exercise based on continual improvement. Consider piloting first, focusing on internal audiences and always with an eye to what can be audited reliably. Applying the tenets of corporate reporting (ACCA 2018) adapted for performance management will help you.

3.3 Capabilities

Mindset and skill capabilities needed to achieve the necessary integrated thinking and action include:

- stewardship, where professional accountants are expected to act in the public interest as guardians of business and societal wealth
- innovative and creative thinking, for example in the design of strategic options, information systems and control mechanisms, and in setting metrics for measuring performance of natural capital management strategies
- connectivity and vision to drive appreciation of risks together with their impacts

FIGURE 3.1: Information system connectivity across the capitals



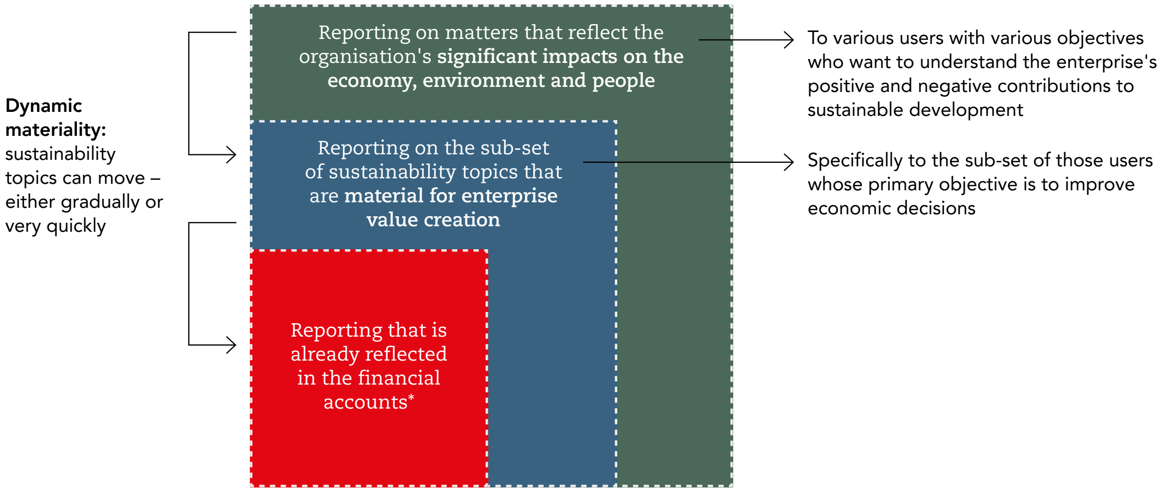
Source: Adapted from IIRC and <IR> Technology Initiative 2016

FIGURE 3.2: Areas for consideration and their expected learning outcomes

AREAS FOR CONSIDERATION	EXPECTED LEARNING OUTCOME
Users and their needs	■ Level of aggregation and disaggregation ■ Format of data, for example dashboard or manipulable for further analysis ■ Connectivity required to external systems, for example ESG investors
Current technology infrastructure	Gap analysis leading to future data coverage needs across the material capitals over the required time frame
Data sources	Connectivity to external sources of information such as suppliers and national databases

- appetite for continual learning, therefore an open and curious mindset related to technical issues of:
  - dynamic materiality (CDP et al. (2020): 5), specifically how natural capital can be material to the organisation over time
  - external impact materiality, the perspective of different stakeholders (SASB et al. n.d.) (see Figure 3.3)
  - improving your natural capital scientific literacy
  - connecting natural capital to business and the other material capitals
  - awareness of the growing action by policymakers and
  - developing mechanisms to identify and capture natural capital data from new sources
- excellent communication skills to use in aiding understanding of complex or specialist natural capital issues
- honed stakeholder engagement and collaboration skills to use in acquiring data, developing and implementing business processes and reporting performance.

FIGURE 3.3: Dynamic and external impact materiality



*Including assumptions and cashflow projections

Source: Adapted from CDP et al. (2020): 5

Example from Nestle – external and internal impact materiality

Importance to stakeholders / Impact on Nestlé's success	Moderate	Significant	Major
Major		Natural resource and water stewardship Climate change	Supply chain stewardship Over- and under-nutrition
Significant	Women's empowerment Community relations	Rural development and poverty alleviation Human rights Business ethics Responsible marketing and influence Product quality Food and nutrition security Resource efficiency, (food) waste and the circular economy Land management in the supply chain	Food and product safety Changing consumer demographics and trends Product packaging and plastic
Moderate	Animal welfare Employee safety, health and wellness Decent employment and equal opportunities	Product regulation and taxation Geopolitical uncertainty Responsible use of technology Data privacy and cyber security	

● For individuals and families ● For our communities ● For the planet

Source: Nestlé (2021)

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