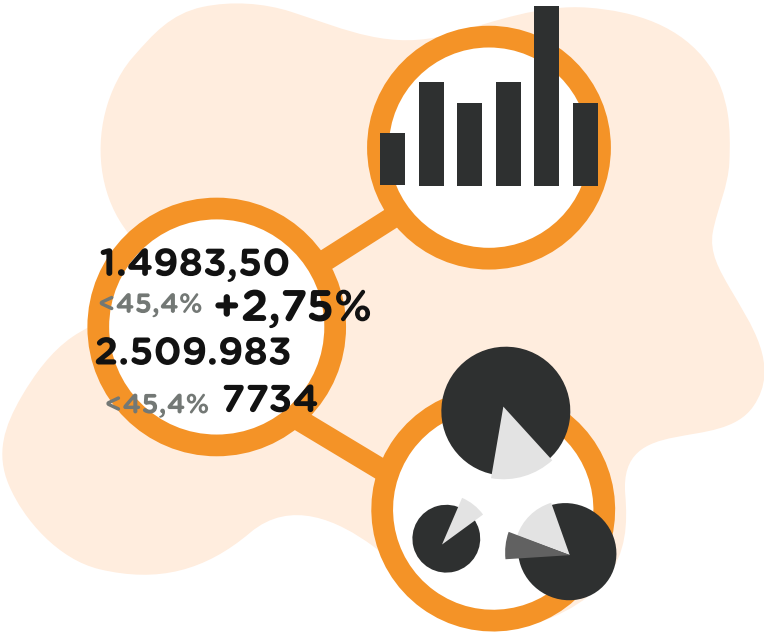
ST.1
Plan my data gathering strategy



Complex activity

This activity helps you to plan your data collection activities for the Preliminary Assessment and also consider the option to combine this activity with the In-Depth Assessment.

INPUT

- Sustainability hotspots for the value chain from the activity *PR.4 Identify sustainability hotspots across the value chain.*

OUTPUTS

- A detailed list of the types of data you need to gather which has been reviewed and agreed with the company Focal Point. This output is not specifically used later in the process but is important to ensure effective and efficient data collection.

ST.1 Plan my data gathering strategy

A significant proportion of your time during the *SET STRATEGY* phase will be used gathering data as part of the Preliminary Assessment. There are several important questions you should consider before starting any data gathering activities to ensure that you get the information you need in a way that is fast and efficient for both you and the company. Managing the data gathering activities poorly might result in the company losing interest and abandoning their eco-innovation activities. The questions are:

Can you combine the Preliminary Assessment and In-Depth Assessment?

An important underlying assumption in the methodology is that at this stage of the process you will not be receiving any funding from the company. If this is not correct and you have been able to obtain funding from the company for this phase of activity or know that you will proceed with other phases of the methodology then you should consider performing the In-depth Assessment (which is described in the step 'Understand in more detail the performance of the company through an In-Depth Assessment') at this point as well. Performing the In-depth Assessment requires more time and effort from both you as the Service Provider and key personnel from the company but will save time overall and will lead to better quality results as you will have more data available on which to base your recommendations for strategic changes at the company.

What data do you really need to collect?

There are lots of different types of data that might be relevant but you decide beforehand which are the most important, based on factors such as the sustainability hotspots and threats and opportunities that you identified during the *PREPARE* phase. The Data Gathering The Data Gathering Checklist can be used to complete this activity – details of which are provided in this activity.

Who within the company will help you organise data gathering activities?

You will need may need to arrange meetings and workshops with key personnel from the company during the Preliminary Assessment. To help facilitate these activities you should ask the CEO to appoint a 'Focal Point' to assist you. This person will act as your main contact within the company.

The Focal Point should ideally have a broad and deep knowledge of the company in order to be able to answer your questions or point you towards the best person within the company to speak to about a specific topic; although you may find that a more junior employee is appointed to help you. Having a Focal Point in place will be useful throughout the rest of your eco-innovation implementation activities.

Once you have answered each of these three questions you can explain your plans to the senior management team so that they understand the likely amount of time and effort required from the company during this phase.

ST.1 Plan my data gathering strategy

Eco—i Manual

HOW TO GO ABOUT IT

1. Review the sustainability hotspots for the value chain then go through the list of possible data types in the Data Gathering Checklist and decide if they are necessary to collect.
2. Review the Data Gathering Checklist with the Focal Point to confirm how and when you will gather the data you require.

→ Further information in the Agri-food, Chemicals and Metals Supplements

Template of Data Gathering Strategy

Type of data	Do I need it?
	☐
	☐
	☐
	☐
	☐
	☐
	☐

Data gathering strategy

Project _____ Date _____ Version _____

Type of data	Do I need it?
Current company vision	
Current strategic goals	
Current products, markets and selling points	
Current business model	
Main competitors and what they offer	
Flow diagram of main internal production steps	
Biggest contributors to production costs	
Biggest contributors to materials and water consumption (for company and for value chain)	
Biggest contributors to energy consumption (for company and for value chain)	
Biggest contributors to health & toxicity concerns (for company and for value chain)	
Biggest contributors to social impacts (for company and for value chain)	
Sales revenue data for last three years	
Profit and loss data for last three years	
Number of employees including breakdown by role/department	
Details of key suppliers	
Details of key partners and nature of partnership	
Details of environmental and social management system or policies in place	
Understanding of how the company is viewed by the local community, suppliers and customers	
Details of the company's policies and practices to promote innovation	
Details of facilities and resources to support product research and development	
Understanding of procurement policies and practices to promote sustainability	

Used during activities
ST.1

ST.1 Plan my data gathering strategy

LEARNING CASE STUDY OF DATA GATHERING STRATEGY

Type of data	Do I need it?
Current company vision	✓
Current strategic goals	✓
Current products, markets and selling points	✓
Current business model	✓
Main competitors and what they offer	
Flow diagram of main internal production steps	✓
Biggest contributors to production costs	✓
Biggest contributors to materials and water consumption (for company and for value chain)	
Biggest contributors to energy consumption (for company and for value chain)	✓
Biggest contributors to health & toxicity concerns (for company and for value chain)	
Biggest contributors to social impacts (for company and for value chain)	
Sales revenue data for last three years	✓
Profit and loss data for last three years	
Number of employees including breakdown by role/department	✓
Details of key suppliers	
Details of key partners and nature of partnership	✓
Details of environmental and social management system or policies in place	✓
Understanding of how the company is viewed by the local community, suppliers and customers	✓
Details of the company's policies and practices to promote innovation	
Details of facilities and resources to support product research and development	✓
Understanding of procurement policies and practices to promote sustainability	

ST.1 Plan my data gathering strategy

Eco—i Agri-foods

TIPS & TRICKS

KEY PERFORMANCE INDICATORS FOR THE FOOD AND DRINK PROCESSING INDUSTRY

Gather information about Key Performance Indicators (KPIs) for the food and drink processing industry to identify and measure sustainability hotspots in the value chain. KPIs for product categories such as grains, beef, milk, packaged cereal, beer, bread, farmed salmon, wine, and cotton have been defined by a number of organisations, such as the Sustainability Consortium (2012). However to access this, and many other sources, a membership is needed. For this reason it is useful to have an eco-innovation partner that has access to, or knowledge about, KPIs. Some of the common topics covered by KPIs can be found below with further information provided in the activity BM.3 Gather additional data on operational performance

Market pressures related to sustainability such as energy, water use, lack of resources and CO_2 emissions

- Price trends of raw materials e.g., cacao, wheat and sugar
- Number of products produced and main markets
- Distribution channels and retailers used
- Overall Equipment Effectiveness (=availability *performance*quality)
- Lean metrics: batch cycle time, inventory days supply (IDS), process velocity, etc.
- Company sales, profit margins, etc.
- Total costs: material, labour, management, safety, etc.

BACKGROUND INFORMATION

References

The Sustainability Consortium (2012). Food, Beverage and Agriculture Sector: Industry Impacts Global Sustainability Development within the Sustainability Consortium Available from: https://www.sustainabilityconsortium.org/consortium-news/food-beverage-and-agriculture-sector-industry-impacts-global-sustainability-development-within-the-sustainability-consortium/#sthash.nt7hZ21H.dpuf

ST.1 Plan my data gathering strategy

Eco—i Chemicals

TIPS & TRICKS

PRIORITIZE KEY PERFORMANCE INDICATORS FOR QUANTIFYING SUSTAINABILITY HOTSPOTS

You can use Key Performance Indicators (KPIs) in the chemical industry to identify and compare sustainability impacts across the life cycle. Some indicators of high relevance for the chemical industry are presented in the following table that guides you to key data you may want to gather from the company to understand their current situation.

Table 11. Examples of different indicators to measure sustainability in the chemical sector. Underlined elements indicate important KPI's for the chemical sector.

Group of indicators	Examples of indicators		
Financial indicators To track sales and costs	• EBITDA: earnings before interest, taxes, depreciation, amortization • ROI: Return on invested capital • COGS: Costs of goods sold • R&D: Research and Development expenditure (%)		
Business performance To gauge operational performance, market and marketing efforts	**Operational** • Overall Equipment Effectiveness • Lean metrics: batch cycle time, inventory days supply (IDS), process velocity...	**Market** • Market growth rate • Market share • Brand equity	**Customers relationships** • Customer satisfaction Index or the Net Promoters Score • Customer retention rate • Marketing effectiveness
Environmental indicators To measure the interaction with or impacts on the environment	**Inputs** • Restricted substances intensity • Recycled/reused content	**Operations** • Water/Energy intensity • Renewable production of energy • Residuals intensity • Air/water releases intensity	**Products** • Recycled/reused content • Restricted substances content • Recyclability • Energy consumption intensity • Water/Carbon/ Chemical footprint
Social indicators To account for the impacts on the society including employees	• Number and rate of employee turnover by age group and gender • Number of accidents related to unforeseen risks, injuries, lost days, absentee rates and fatalities • Staff value and satisfaction • Average hours of training per year per employee • Assessment and management of impacts of operations on communities		

ST.1 Plan my data gathering strategy

Eco—i Chemicals

Furthermore, you can build indicators to represent important sustainability hotspots. For example, if you identify hazardous waste as a sustainability hotspot along a product's life cycle, you could build a KPI representing hazardous waste at each life cycle stage (e.g. kg hazardous waste in phase X per kg product sold to consumer).

Additionally, you may want to build KPIs that can be used to set strategic sustainability objectives, guide and monitor continuous improvement, and communicate sustainability performance to workers, key partners, and external stakeholders.

ST.1 Plan my data gathering strategy

Eco—i Metals

BACKGROUND INFORMATION

Table 5 provides an overview of strategies commonly encountered in the machinery and equipment manufacturing subsector according to product type and customer market segment.

Table5: Typical strategies for the different market segments in the machinery and equipment manufacturing sub-sector.

Niche Market	**Mass Market**
High-end products	
• Automation features for complex tasks • Long lifetime, high precision/safety • Tailor-made machines/lines • Inclusion of pre/after-sales service • Strengthen export business by increasing geographic footprint • Produce upper mid-end product to defend high-end market position	• Development of solutions for entire application process • Drive innovation in core business including after-sales service
Mid-range products	
• Basic features for standard tasks • Long lifetime, high output, good precision/safety • Standard or slightly customized machines/lines • Develop niche globally • Defend again new entrants • Basic services • Explore options (e.g. differentiation) to expand into high-end segment	• Include cost focus into existing technology-driven strategy • Switch from technology to cost focus including product simplification

ST.1 Plan my data gathering strategy

Eco—i Metals

Niche Market	**Mass Market**
Low-end products	
• Minimal features for simple tasks • Limited lifetime, precision & safety • Limited to no automation, minimal flexibility • Standard single machines • Expand into other niche markets as well as mid-end entry options • Upgrade technology and management systems for expanded product portfolio	• Develop existing niche position in local and global markets • Focus on domestic market growth