

# IAMC Toolkit

Innovative approaches for the Sound Management of Chemicals and  
Chemical Waste

## PHASE I GET STARTED

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**Company guide**

**B11**



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1. Select the Right Company
2. Understand the Company's Value Chain
3. Understand the Company's Experience in Sustainability and Innovation
4. Set Ambitions and Form an Innovation Team

# Phase 1: Get Started



Source: ISSPPRO

# Get Started: Introduction

The aim of this step is to support the selection of companies suitable for the IAMC approach.

In order to set the foundation for conducting an IAMC project with the selected company, the Toolkit user will learn how to:

- Characterise the company's strategy, product portfolio and value chain trends
- Characterise the company's experience with Operational Excellence, sustainability and innovation
- Set ambitions and form an Innovation Team

# Phase 1: Get Started

## Key Tasks



- Select the right company and land the client
- Characterize the company's strategy, product portfolio and main trends in their value chain
- Understand the company's experience in innovation
- Identify initial possibilities for continuous improvement
- Set ambitions and form an innovation team

## Deliverables

- Summary of the company's business strategy and value chain trends
- Agreement on project ambition and team; initial recommendations for continuous improvement

# Select the Right Company

# The Right Type of Company

Not every company will be a good fit for the IAMC approach. Choosing suitable companies is an important first step.

A suitable company for the IAMC approach...

- Can be any size, but SMEs typically benefit most
- Is a manufacturer or industrial user of chemicals
- Is **innovative and concerned about sustainability issues** relating to its business operations
- Is willing to share information and commit its own resources (capital, personnel) to **implement improvements in sound chemicals management**
- Operates in a **value chain with potential** for improving economic, environmental and social performance

# Consider the Following Topics when Selecting Companies (1)

## Company type

- What are the key activities of the company (synthesis, formulation, industrial use of chemicals)?
- What markets does it serve?

## Company management's interest in sustainability innovation

- How important are sustainability issues to the company?
- Is the company willing and capable of investing resources to improve environmental and social performance?
- Does the company have experience in innovation?
- Have you worked with them already?

## Product and service offerings

- What are the primary and secondary products and services? How are they bundled? Are they standard or customized products?
- What are product uses and who are the main customers?
- What is the company's growth strategy (e.g. product development, market development)?



# Consider the Following when Selecting Companies (2)

## Trends in the value chain (products and markets)

- Market trends
- Regulatory/policy trends
- Technology trends

## Potential for improving sustainability performance

- Does the company use hazardous chemicals or chemicals of concern in processes or products?
- Does the company have economic, environmental or social challenges?
- Do the company's customers have economic, environmental or social challenges? Are direct customers or end customers concerned with sustainability issues?

# Finding Information on Companies and Their Value Chains

Some resources will need to be invested at this point. You can get information from the following sources:

- Carefully research the company website, brochures, marketing information
  - Tips: Download the technical data sheets (TDS) and safety data sheets (SDS) of the products. Identify the different services offered. Are the products standard or customized?*
- Desk-top research on the value chain and similar companies in other regions and sizes
- Short questionnaires to the companies
  - Tip: Fill in the information you already have and send the completed questionnaire to the company with your marketing package. Companies are more willing to provide feedback when they only have to confirm and provide a small amount of new information.*
- Short and targeted phone interviews with regional experts, industry organizations or government agencies

# Prioritize and Select Companies

Prioritizing companies to approach depends on many factors stated in the previous slides.

Some points to remember when you prioritize:

- Make sure you have the **expertise in the target subsector** or can bring in qualified partners.
- Consider selecting **companies at different stages of the same value chain** (e.g. printing ink manufacturer and an ink printing company) to help identify potential not only in each company but also in the value chain.
- Choose **companies experienced in innovation and committed to sustainability**.

# Land the Client

Promote the benefits of the IAMC approach to land new clients.



[A0: About IAMC toolkit](#)

Be sure to **emphasize economic advantages as well as environmental and social benefits** including:

- Accessing new customers and growing markets via improved or new products and services
- Increasing resource efficiency and business productivity
- Reducing waste management costs
- Improving legal compliance
- Enhancing reputation amongst customers as an innovative company

# Understand the Company's Value Chain

# Understand Where *Value* Comes From (1)

After landing the client, improve on the knowledge obtained in “*Select the Right Company*”.

- Understanding the value chain will help improve the sound management of chemicals and waste across the products’ life cycle.

Answer the questions from “*Select the Right Company*” in more detail. Additionally, understand what is important to the company and its value chain:

- Understand the products
- Understand where *value* comes from

## Understand Where *Value* Comes From (2)

**Understand the products:** List the main product groups, their functionality (why do customers buy it?) and their different target customer segment (who buys it?). Are they standard or customized?

*Tip: Be specific when describing the product functionality and customer segment.*

**Understand where *value* comes from:** Sketch the products' value chains and highlight key value adding as well as non-value adding activities.

*Tip: Put yourself in the “shoes” of your customers and your customers' customers to understand what is important to them.*

# Understand Trends Affecting the Company

Research the company's market in more detail to identify the potential risks and opportunities related to the sound management of chemicals. Structure your market research according to the following trends and update current information:

- **Market trends:** How are consumer demand or preferences, supply chain pressures, etc. affecting the company and its future?  
*Example: The LEED certification (or similar green building certifications) offers new market opportunities to manufacturers of construction chemicals to produce formaldehyde-free resin-based products.*
- **Regulatory/Policy trends:** How are law/regulations by national or exporting markets affecting the products, production and sales? Are policies (e.g. sustainable public procurement) a driver?  
*Example: REACH SVHC, Global Alliance to Eliminate Lead Paint*
- **Technology trends:** What new technologies (production methods, materials, IT-solutions) are influencing the market?  
*Example: Production of PLA-based polymers from renewable resources, process intensification, 3D printing, etc.*

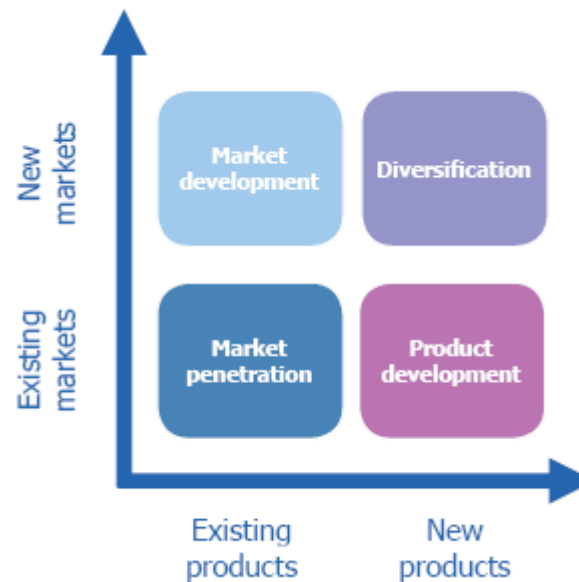


# Understand the Strategy for Growth

The IAMC approach focuses on innovation to improve the company's sound management of chemicals and increase its business performance.

Investigate the company's current growth strategy and include it in your analysis so the company will be more likely to implement the innovations you have recommended.

- **Market penetration:** increase the current market share with existing products
- **Product development:** expand into the current market with new products (goods and/or services)
- **Market development:** expand into new markets or applications with existing products (goods and/or services)
- **Diversification:** Enter new markets or applications with new products (goods and/or services)



Source: ISSPPRO

# Understand the Company's Experience in Sustainability and Innovation

# Understand the Company's Experience in Sustainability and Innovation

Understanding the company's experience in sustainability-oriented innovation in the chemical products' value chain helps to set realistic, yet ambitious goals for the project.

Start by understanding the company's experience in:

- **Operational Excellence** – Do they have an integrated programme or management system for continuous improvement and safely creating long-term value?
- **Sustainability** – How do they include environmental, social and economic aspects into their operations and decision-making processes?
- **Innovation** – How does the company innovate better solutions?

# Understand the Company's Experience in Operational Excellence (OE)

Discuss the following with management to know their experience with Operational Excellence:

- What does the company understand under the term “operational excellence”?

A simple definition: “*an integrated management system for safely creating long-lasting value*”

- Does the company use KPI's to guide operations and decision-making processes? Do all departments use the same KPI's?
- Does the company have:
  - Safety, Health and Environment (SHE) management system?
  - Overall improvement programmes, e.g. quality management?
  - Functional improvement programmes, e.g. reliability and maintenance improvement, energy efficiency, value stream mapping?

# Understand the Company's Experience in Innovation

Discuss the following with management to know their experience with Innovation:

- Is there an R&D department? Is there an innovation team? Which departments actively contribute to the team?
- Is there a formal innovation process?
- What is the main driver of innovation of the company (e.g. regulatory, customer demand, technological advances)?
- What top two innovation projects were undertaken in the last four years?
- What category of projects were implemented (e.g. good housekeeping, process optimization, product modification, organizational improvement, business model improvement, etc.)?
- How successful were the innovations? How was success measured?
- What was learned? How was this included in the current innovation process?

# Understand the Company's Experience in Sustainability

Discuss the following with management to know their experience with sustainability:

- What does the company understand under the term “sustainability” (i.e. economic, environmental and social aspects)?
- What are the top two sustainability improvements undertaken by the company in the last four years?
- Does the company include sustainability in its strategy? If so how? (E.g. does it have KPIs for environmental and social aspects?)
- Does the company integrate sustainability aspects in its operations? If so how?
- Does the company look at the sustainability impacts of its business operations over its products' entire life cycle? If so, how?
- Do they have eco-labels or sustainability certificates for products or processes? If so, which ones?
- Do they report (internally or externally) their sustainability performance? If so, how?
- According to the company understanding of “sustainability”, what are the main issues/challenges the company is facing?
  - ⇒ Get the company to list two economic, social and environmental issues.

# Identify initial possibilities for continuous improvement

# Identify initial possibilities for continuous improvement

The collected information shows the level of experience the company has and shows potential areas for improvement.

Propose one activity or action the company could include as part of its **process of continuous improvement** for...

- **Operational Excellence**: e.g., implement a value stream mapping activity in order to continuously improve manufacturing productivity and reduce waste
- **Innovation**: e.g., implement a simple but targeted innovation management system built on customer needs and sustainability principles
- **Sustainability**: e.g., incorporate social and environmental KPI's in the company's decision-making processes



# Set Ambitions and Form an Innovation Team

# Set Ambitions

The consultant should agree with management on the **level of ambition** for the IAMC project. Some companies with a high level of experience in sustainability and innovation will be able to set ambitious targets, while other companies with less experience will set less ambitious targets.

The ambition can be increased over time as the company becomes more experienced in sustainability innovation. Examples of ambition could be:

*Increasing ambition*

- Establish good practice hazard management of chemicals on-site and minimize the risk of exposure and accidents
- Improve resource efficiency, reduce pollution and increase productivity
- Improve safety of products and processes by using safer alternative chemicals
- Incorporate life-cycle thinking in the design of products and services to improve sustainability performance over the product's complete life cycle
- Improve the product's life-cycle sustainability performance with new business models (e.g. chemical leasing)

# Tasks of the Innovation Team

## **General tasks:**

- Coordinating and monitoring the project processes
- Ensuring effective collaboration and information exchange between departments as well as external partners and other stakeholders
- Embedding sustainability in business operations
- Communicating progress and results to all stakeholders

## **Specific tasks:**

- Leading the innovation assessment and collecting critical data
- Identifying and prioritizing sustainability hotspots over the products' life cycle
- Generating innovative options (processes, products, business models)
- Evaluating and prioritizing innovative solutions
- Executing and monitoring the implementation action plan
- Reporting to top management and gaining approval to proceed at important milestones (e.g. prioritization and implementation)

# Members of the Innovation Team

## **The team should include persons:**

- Understanding the whole facility, the value chain, and key partners and stakeholders (such as customers, suppliers, local authorities)
- Coming from different departments such as marketing and sales, purchasing, finance, legal, logistics, production, R&D, quality control, HSE, etc.
- With different ways of approaching problems and collaboration: e.g. creative, seeing connections, organizing ideas, motivating, etc.

## Note:

- Some team members will be core members, others will be called in as needed.
- Choose team members according to the level of ambition and tasks required.
- Keep the team size manageable in order to optimize resources and enable effective decision-making.
- Assign a decision maker as project coordinator and allocate an initial budget for the project.

# Innovation Team Checklist

- Can the innovation team be partly integrated into an existing team at the company?
- What information does the innovation team need?
- Who has this information?
- How often should the innovation team meet? Who should be on the innovation team? How should suppliers, customers and other key partners be involved?
- How can the innovation team permanently drive sustainability, innovation and continuous improvement?

# Sources

# Sources

- CSD Engineers, Switzerland / ISSPPRO, Germany, 2015
- UNIDO: Cleaner Production Toolkit, 2010

# Images

- ISSPPRO, Germany, 2015



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