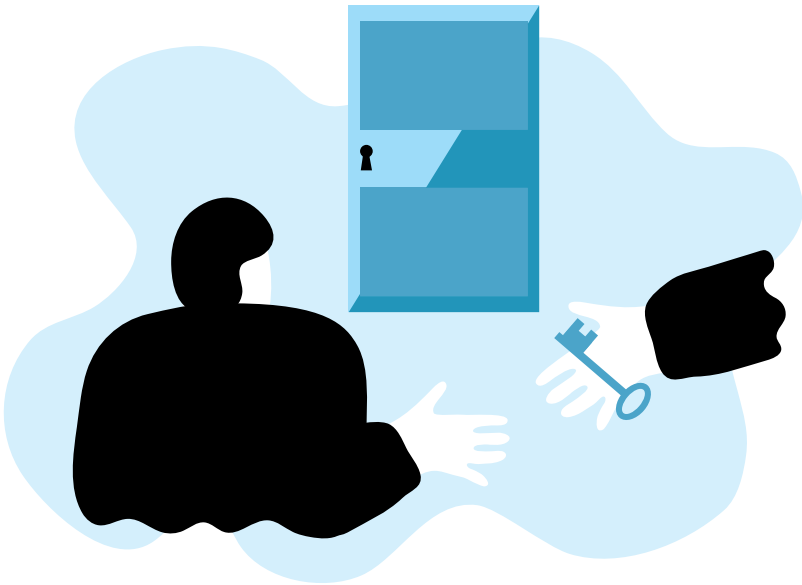
IM.3
Provide guidance and solve problems



Requires dialogue

The aim of this activity is to provide appropriate guidance and problem-solving support for the company during the execution of the first project for eco-innovation.

INPUT

- A detailed plan for the first project for eco-innovation, from the activity *IM.1 Create a project plan*.

OUTPUT

- First project for eco-innovation completed successfully, used for the Phase *REVIEW*, throughout the step *Review the performance of the first project for eco-innovation*.

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Many of the things you can do to support the first project for eco-innovation will be similar to normal innovation projects, but there are some aspects that require special attention within a project for eco-innovation. This activity highlights some of those issues and provides guidance on how to address them.

HOW TO GO ABOUT IT

Make responsibilities clear

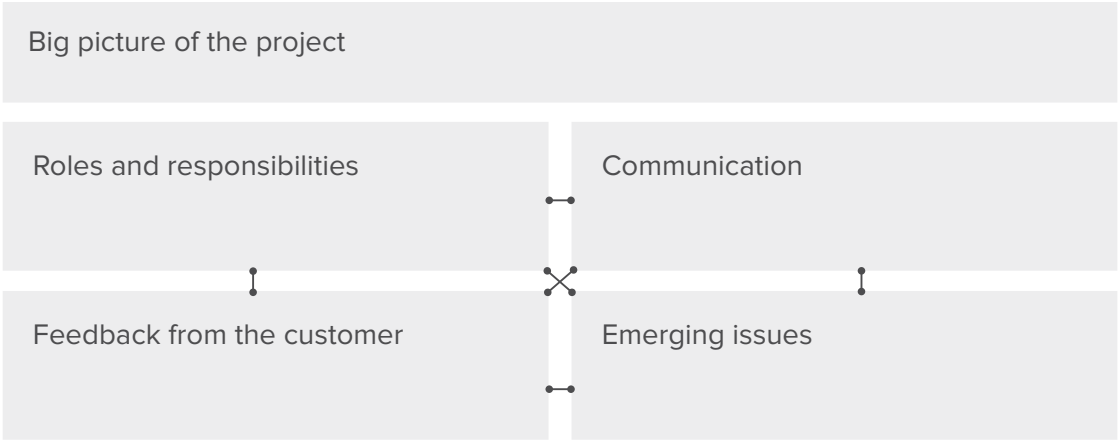
At the start of a project for eco-innovation, it is important to make sure responsibilities and ownership of tasks are clear, this will help to get engagement and commitment from project team members. As eco-innovation will involve new, and sometimes unplanned, activities it can be difficult to allocate all of the tasks to relevant personnel at the start of the project. However, as a minimum, you should request the on-going support of the Focal Point to coordinate and monitor the progress of the project. Depending on the situation, it may be that you as the Service Provider take on the Project Manager role. Alternatively, the CEO may appoint a Project Manager to the project from their own personnel. Either way, a key aspect of the Project Manager role is to ensure that tasks are allocated to individuals who then have the responsibility to ensure that the task is completed on time and in accordance with the specification. Where a project falls across two or more different functions within an organization (e.g. 'Production' and 'Marketing') it is particularly important to ensure that responsibilities and reporting channels are clear to avoid the project 'falling down the cracks' between the functions.

Establish ways to communicate

Communication is another important aspect of a project for eco-innovation in which the Project Manager will play an important role. The Project Manager should act as a central focal point for the project and make everybody aware that if they have any questions, comments or concerns about the project then the Project Manager should be the first person they speak to. This is true for both internal and external partners (for example where suppliers or research centres are involved in the project). Other ways to promote good communication include:

- Set-up a project notice board – This should provide key facts about the project such as the aims and objectives of the project, who is involved, how other people can contribute etc. The project notice board should also be used to record what activities each team member is working on and their progress. It is important that this information is regularly updated so that the notice board is viewed and credible and up to date source of information about the project.

Template of Project Implementation



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- Hold regular progress meetings – If members of the project team are working on different tasks it can be useful to hold regular progress meetings (every fortnight for example) where one person per task reports on progress on that task. This does not need to involve every member of the team, just those that are the owner of a particular task. To ensure the meetings are short and effective, try to establish a simple set of questions for people to answer when reporting back. For example:
  - What progress has been made?
  - What has gone well?
  - What problems have you encountered?
  - What could we do to improve performance?
- Organize open briefings – Much of the eco-innovation activity within the company to date may have been conducted by you as the Service Provider in discussion with the Senior Management Team. Therefore, the start of the project is a good opportunity to organize a briefing session that anybody within the company can attend to learn about the project and ask questions. Such briefings should not be compulsory to attend as otherwise they can become a significant cost for the company. Further briefings after key milestones can also be useful to keep interested stakeholders up to date.

Get regular feedback

Related to the issue of communication is the issue of feedback. Within projects that aim to develop a new product, there should be somebody in the project team that is acting as the representative of the customer (sometimes called the 'Voice of the customer'). That person should receive regular updates and demonstrations so that they can provide feedback. It is important to get this feedback as early as possible so that changes can be made before further work is completed, which makes changes more difficult and considerably more expensive. In order to get early feedback, the product development schedule should prioritize the completion of key features at the start of the project, even if this means presenting the representative of the customer a partial solution, so that they can provide feedback on the features of the solution that are complete. Organizing regular (e.g. fortnightly or monthly) 'demonstration' meetings with the representative of the customer to gather feedback, also has the advantage that it provides frequent small milestones that can help focus and motivate the project team.

Solve problems quickly

During the course of a project for eco-innovation, you are likely to encounter some problems. Creative thinking can help to overcome these problems quickly and effectively. To help encourage creative problem solving, you can help the team to apply structured problem solving tools. One activity that can help with this is applying the *9 Windows on the World template*. This template was introduced in the activity *BM.7 Generate technical ideas for the value proposition block* to support idea generation, but it is also well suited to dealing with technical problems. Refer back to the activity *BM.7 Generate technical ideas for the value proposition block* for instructions on how to apply the *9 Windows on the World template*. If a solution cannot be found within the company then it may be necessary to look to external partners for ideas. For instance:

- Suppliers often have a lot of technical knowledge about their products which may be helpful.

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- Trade associations may be able to put you in contact with other companies that face the same problem as you so that you can work on a joint solution.
- Retailers may be able to provide more insights into customer buying habits or help you engage directly with end users.

Keep the big picture in mind

A final consideration for the Service Provider during the *IMPLEMENT* phase is that you must ensure that the project team continue to be aware of the big picture to which the project is contributing. For instance, are decisions being made that are consistent with the business model and business strategy that have been set? Is the project having a positive impact on the company's social issues such as gender equality? What other operational areas of the company will be impacted by this project? What have we learned that reinforces or casts doubt on the assumptions that were made prior to beginning the project? The aim here is to strike a balance between maintaining focus on completing the project as quickly and effectively as possible but at the same time trying not to miss opportunities that might emerge to enhance the business value of the project by becoming too 'blinkered'. This is a difficult challenge, but remember that a comprehensive review of the project will be undertaken following the completion of the project - described in the *REVIEW* phase.

Project implementation

Project _____ Date _____ Version _____

Big picture of the project

Are decisions being made that are consistent with the business model and business strategy that have been set?

Is the project having a positive impact on the company's social issues such as gender equality?

What other operational areas of the company will be impacted by this project?

What have we learned that reinforces or casts doubt on the assumptions that were made prior to beginning the project?

Roles and responsibilities

Who does what?

Communication

What are the communication channels? Who are the people managing the communication?

Feedback from the customer

How is the customer reacting to our implementing activities?

Emerging issues

How could they be addressed creatively?

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LEARNING CASE STUDY OF PROJECT IMPLEMENTATION

Big picture of the project

- *What impact is reduced fish loss in the factory having on the wider value chain? Is fish catch reducing? Is the price of tuna going down?*
- *How is the project viewed by staff? Is it helping to embed a culture of eco-innovation?What impact is reduc*

Roles and responsibilities

Production Manager:
- *Day-to-day project management*
- *Communication with management team*
- *Planning of tests*

Production Technicians:
- *Implementation of tests*
- *Data gathering*
- *Support for idea generation*

Service Provider:
- *Propose ideas to test*
- *Review of testing*
- *Communication with management team*

Communication

Weekly progress meetings:
- *Managed by Production Manager*
- *CEO audience*

Project noticeboard:
- *Managed by Production Technicians*
- *All internal audience*

Progress reports:
- *Managed by Service Provider*
- *Senior Management audience*

Feedback from the customer

- *'Customer' is Senior Management Team*
- *Feedback from first progress report was positive*
- *Keen to see results of first sub-project*

Emerging issues

- *'Significant quantity of fish discarded at first quality inspection, apparently due to poor temperature control during transportation from market. Could include this process within the scope of the project.*

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TIPS & TRICKS

GET CEO TO EXPRESS SUPPORT

The explicit support of the CEO is often an important factor in the success of large projects. Therefore, ask the CEO to make a statement to all staff at the start of the project to help launch the practical eco-innovation activities, expressing why the company is pursuing an eco-innovative strategy and how this first project will contribute to that strategy.

→ Further information in the Agri-foods and Metals Supplements

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Eco—i Agri-foods

BACKGROUND INFORMATION

Additional tools may be used to support the COMPANY in implementing specific technical projects in the food industry (e.g. conducting specific audits, developing processes, optimising existing process, or formulating a new products). The following is a list of selected technical tools and resources to support the implementation of eco-innovation project in the food industry:

- UN Environment Publications:
  - Moving Ahead with Technologies for Eco-innovation, 2016, UN Environment
  - Cutting waste… Resource efficiency and eco-innovation for sustainable food chains, 2013, UN Environment
  - Guidelines for social Life Cycle Assessment of products, 2009, UN Environment
- UNIDO/UN Environment Toolkits
  - Cleaner Production Toolkit: http://www.unido.org/en/resources/publications/energy-and-environment/industrial-energy-efficiency/cp-toolkit-english.html
  - Responsible Production Toolkit: http://www.unep.org/responsibleproduction/
- OECD Sustainable Manufacturing Toolkit. Seven Steps to Environmental Excellence. Start-up Guide. 2011. http://www.oecd.org/innovation/green/toolkit/48704993.pdf
- U.S EPS's The Lean and Environment Toolkit: http://www.epa.gov/lean/environment/toolkits/environment/resources/LeanEnviroToolkit.pdf
- WRAP publications and Toolkits found at http://www.wrap.org.uk/
  - Self-Assessment Review for Food and Drink Manufacturers: http://www.wrap.org.uk/sites/files/wrap/WRAP_Food_Drink_Manufacturers.pdf
- Waste Prevention Good Practice Guidance: http://www.wrap.org.uk/sites/files/wrap/Waste%20prevention%20good%20practice%20guidance.pdf
- Reducing Food Waste through Retail Supply Chain Collaboration: http://www.wrap.org.uk/sites/files/wrap/WRAP_IGD_supply_chain_report.pdf
- Saving Money Through Resource Efficiency: Reducing Water Use: http://www.wrap.org.uk/content/saving-money-through-resource-efficiency-reducing-water-use
- Tracking Water Use to Cut Costs: http://www.wrap.org.uk/content/tracking-water-use-cut-costs
- Reducing Your Water Consumption: http://www.wrap.org.uk/content/reducing-your-water-consumption
- Finding Cost Savings: Resource Efficiency for SMEs: http://www.wrap.org.uk/content/finding-cost-savings-resource-efficiency-smes
- Resource Efficiency for Managers: http://www.wrap.org.uk/content/resource-efficiency-managers
- Environmental Strategic Review Guide: http://www.wrap.org.uk/content/environmental-strategic-review-guide
- Waste Mapping: Your Route to More Profit: http://www.wrap.org.uk/content/waste-mapping-your-route-more-profit
- Workforce Partnerships for Resource Efficiency: http://www.wrap.org.uk/content/workforce-partnerships-resource-efficiency
- Your Guide to Environmental Management Systems (EMS):

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http://www.wrap.org.uk/content/your-guide-environmental-management-systems-ems

- WRAP Waste Hierarchy Guide: http://wastehierarchy.wrap.org.uk/
- Opportunities for Resource Efficiency in the Food and Drink Sector (2011): http://www.wrap.org.uk/sites/files/wrap/Opportunities%20for%20resource%20efficiency%20in%20the%20food%20and%20drink%20sector%20FINAL.pdf
- Lightweighting the Can Pack: http://www.wrap.org.uk/content/lightweighting-can-pack
- Lightweighting Carbonated Soft Drinks Bottles: http://www.wrap.org.uk/content/lightweighting-carbonated-soft-drinks-bottles

- World Resource Institute publications:
  - Reducing Food Loss and Waste: http://www.wri.org/sites/default/files/reducing_food_loss_and_waste.pdf

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Eco—i Chemicals

BACKGROUND INFORMATION

Additional tools can support the company in implementing specific technical projects in the chemical industry (e.g. developing a new chemical process, optimising existing production, or formulating a new and safer chemical product). The following is a list of selected technical tools and resources to support the implementation of technical projects in the chemical industry:

Chemical substitution and product formulation

- SIN List and SINIMILARITY Tool
  - What it is: You can search your chemicals and identify if they are on the CHEMSEC SIN (Substitute It Now) List. If not, the SINIMILARITY tool can tell you if they are similar to the SIN listed chemicals. The chemicals on the SIN List have been identified by CHEMSEC as Substances of Very High Concern based on the criteria established by the EU chemicals regulation REACH. There are substitution options listed for a limited number of chemicals, depending on application and on the SIN List website.
  - Further information: http://sinlist.chemsec.org/
- ECHA's Information on Chemicals portal
  - What it is: You can search your substances and find out their hazard classification and associated hazard and precautionary statements according to the CLP regulation (the EU's implementation of GHS). You can also access REACH dossiers for all registered substances.
  - Further information: http://echa.europa.eu/information-on-chemicals
- The Substitution Support Portal
  - What is does: Support your efforts in substituting hazardous substances by providing a repository of information on substitution methods, substances of concern, restricted substances, case studies, and substitution tools.
  - Further information: http://www.subsport.eu/
- OECD Substitution and Alternatives Assessment Toolbox (SAAT)
  - What it does: The OECD SAAT is a compilation of resources relevant to chemical substitution and alternatives assessments.
  - Further information: http://www.oecdsaatoolbox.org/
- Guide on sustainable chemicals
  - What it is: A decision tool for substance manufacturers, formulators and end uses of chemicals. Case studies are available for reference.
  - Further information: http://www.umweltbundesamt.de/en/publikationen/guide-on-sustainable-chemicals
- GHS Column Model
  - What it is: A simple tool allows for the comparison on chemicals/substances or materials/mixtures based on six hazard endpoints according to GHS classification.
  - Further information: http://www.dguv.de/ifa/Praxishilfen/GHS-Spaltenmodell-zur-Substitutionspr%C3%BCfung/index-2.jsp
- Cleangredients
  - What it is: A subscription-based online database that helps cleaning product formulators identify environmentally friendly ingredients and allow manufacturers to showcase their ingredients.
  - Further information: http://www.cleangredients.org/home

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Process modelling

- Aspen Plus
  - What it is: Aspen Plus is a license-based chemical process optimisation software used by commodity, fine and specialty chemical industries for the design, operation, and optimisation of safe and profitable manufacturing facilities
  - Further information: http://www.aspentech.com/products/aspen-plus.aspx
- HSC Chemistry
  - What it is: HSC Chemistry is an equilibrium thermochemical software with a flow sheet simulation mode used for chemical reactions and equilibrium calculations.
  - Further information: http://www.outotec.com/en/Products--services/HSC-Chemistry/
- PIUS Practice Tools
  - What it is: PIUS Practice Tools is a website with free Cleaner Production tools, such as VOC balance calculator and a solvent cleaning tool.
  - Further information: http://www.pius-info.de/en/pius_info_pool/tools/

Plant safety in the chemical industry

- Chemical hazard management: UN Environment's Responsible Production Toolkit
  - What it is: The Responsible Production toolkit provides a step-by-step guidance on identifying and understanding the hazards and risks related to the company products and operations and on developing a plan to address these and chemical safety issues. The Responsible Production Guidance and Toolkit is primarily targeting SMEs' managers and safety officers, but can also be used by local authorities and government officials in their planning and inspection activities.
  - Further information: http://www.unep.org/responsibleproduction/
- Process safety: Chemical Reactivity Evaluation Tool (RMT)
  - What it is: (RMT) can be used as an aid in identifying and evaluating chemical reactivity hazards so that they may be effectively avoided or controlled. It targets engineers, chemists, and management in SMEs responsible for process safety. It facilitates the (1) identification of most chemical reactivity hazards associated with their chemical processing and support operations; and (2) direction to the Centre for Chemical Process Safety (CCPS) documentation and other references of the best chemical engineering practices for the identification of reactivity hazards.
  - Further information: http://www.aiche.org/ccps/resources/tools/reactivity-management-tool
- Occupational Health & Safety: Control Banding using COSHH Essentials
  - What it is: An online tool providing advice on controlling the use of chemicals for a range of common tasks, e.g. mixing, or drying.
  - Further information: http://www.hse.gov.uk/coshh/essentials/