

iMPU survey results: Organization

In this section of the iMPU survey results analysis we look at the important factors in the organization of environmental initiatives in product development. Specifically, we wanted to learn more about:

- How companies are **integrating environmental initiatives into the product development process**.
- **Who needs to be involved** in implementing and supporting environmental initiatives.

Integration of environmental initiatives in the product development process

In the survey, we asked the question: *“Where in the product development process do you mainly incorporate environmental initiatives?”*. The results are shown in Figure 1. Which presents the response categories in an approximate chronological order, with the early phases of the product development process near the top and the later stages towards the bottom. We found that the majority of companies (75%) incorporate environmental considerations when selecting materials. This is likely to be linked to the earlier finding that environmental legislation, particular hazardous substances legislation, is one of the key drivers for [Getting Started](#) on ecodesign amongst the companies surveyed.

The second most frequently cited phase in which environmental initiatives are incorporated was the initial design phase, or ‘fuzzy front-end’ as it is sometimes referred to. This is backed up by the finding that 82% of respondents said their company included environmental considerations within the requirements specification for new projects. Companies therefore seem to understand the importance of the front end activities in determining the environmental impacts of the product, with one respondent noting that, *“It is our goal that environmental actions become a natural part of the front end.”*

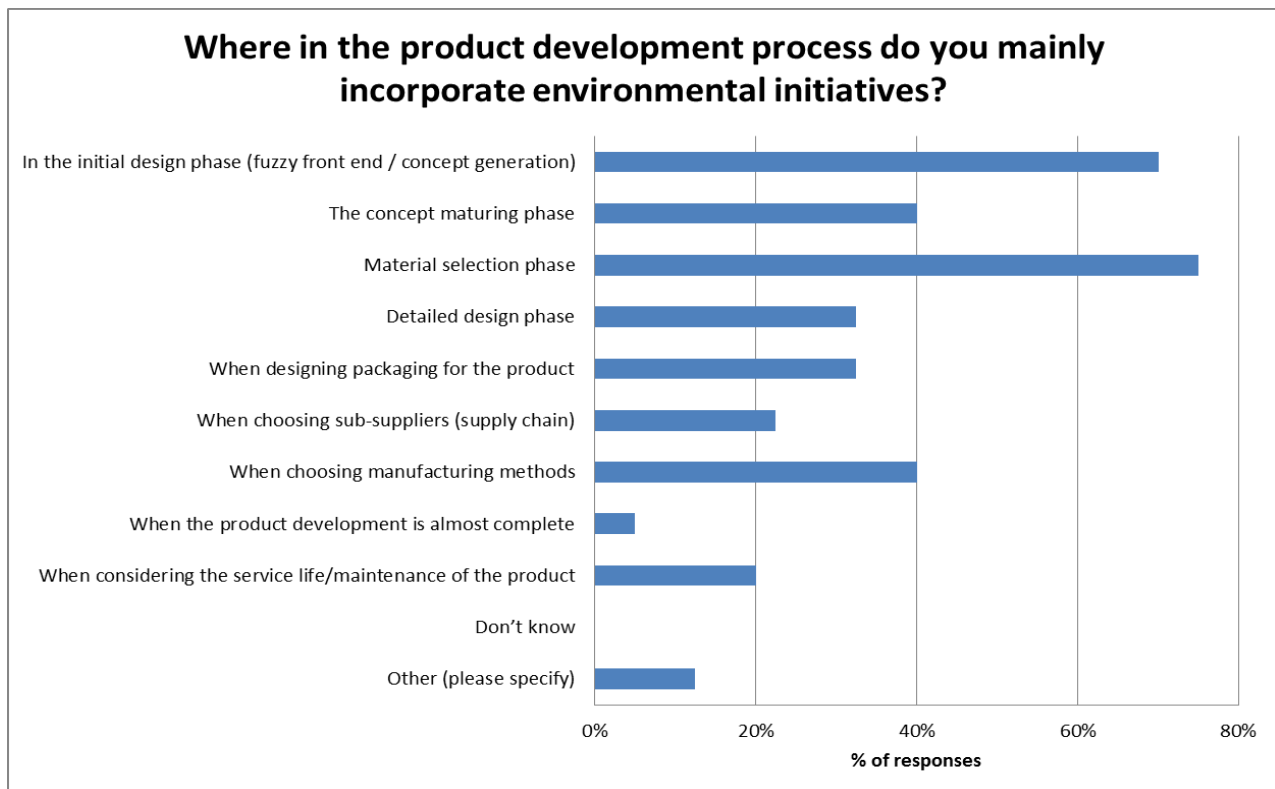


Figure 1. Responses to the question (n=24): *“Where in the product development process do you mainly incorporate environmental initiatives?”*

This is good to see, as for some time the research literature has been advocating an increased focus on incorporating environmental initiatives into the front end activities in order to maximize the scope for innovation and step-change improvements in environmental performance ([Olundh, 2006](#); [O'Hare, 2010](#)).

However, companies have not yet mastered the front end activities, as was highlighted by some of the responses to the question, *"Is there anything that is stopping you from incorporating environmental initiatives earlier in your product development process?"*. Some examples of these responses are:

- *"We do fast prototyping, there is no time for long initiatives."*
- *"Sustainability should be equal to quality and cost, but we are not there yet."*
- *"Lack of time and resources."*
- *"I think many people think that sustainability is a bit overwhelming, and therefore a bit difficult to get started with."*
- *"Lack of knowledge."*

In the later stages of the product development process there is another small peak in interest when it comes to selecting manufacturing processes. This is possibly linked to the potential direct cost savings of using manufacturing process that minimize material and energy consumption. Despite this, it would still seem that the majority of companies are focusing their efforts on incorporating environmental initiatives into the early stages of product development, which is an encouraging trend.

Who needs to be involved

When we asked about who is currently involved in the implementation of environmental initiatives, we found that in the majority of the companies there is a good spread of environmental knowledge throughout the company with 58% of respondents stating that *"Everybody knows a little about environmental considerations and makes small initiatives"*, and 46% of respondents claiming that, *"Every department (marketing, R&D, etc.) in the company knows about environmental initiatives and contributes"*), see Figure 2.

There also seems to be some formal structure to the ecodesign activities being completed, with 46% of respondents saying that they work on environmental initiatives in the context of an environmental management system such as ISO 14001. Linking ecodesign initiatives to an existing environmental management system is a smart and powerful approach to raising ecodesign awareness and engagement amongst staff as part of the standard requires the company to implement procedures to ensure that all staff are aware of:

- *"...the significant environmental aspects and related actual or potential impacts associated with their work, and the environmental benefits of improved personal performance,*
- *their roles and responsibilities in achieving conformity with the requirements of the environmental management system..."* ([ISO 14001:2004](#)).

Further guidance on how to link environmental initiatives within product development to an environmental management system can be found in ISO [14006:2011](#).

Which of the statements below best characterizes your company's work with environmental initiatives in product development?

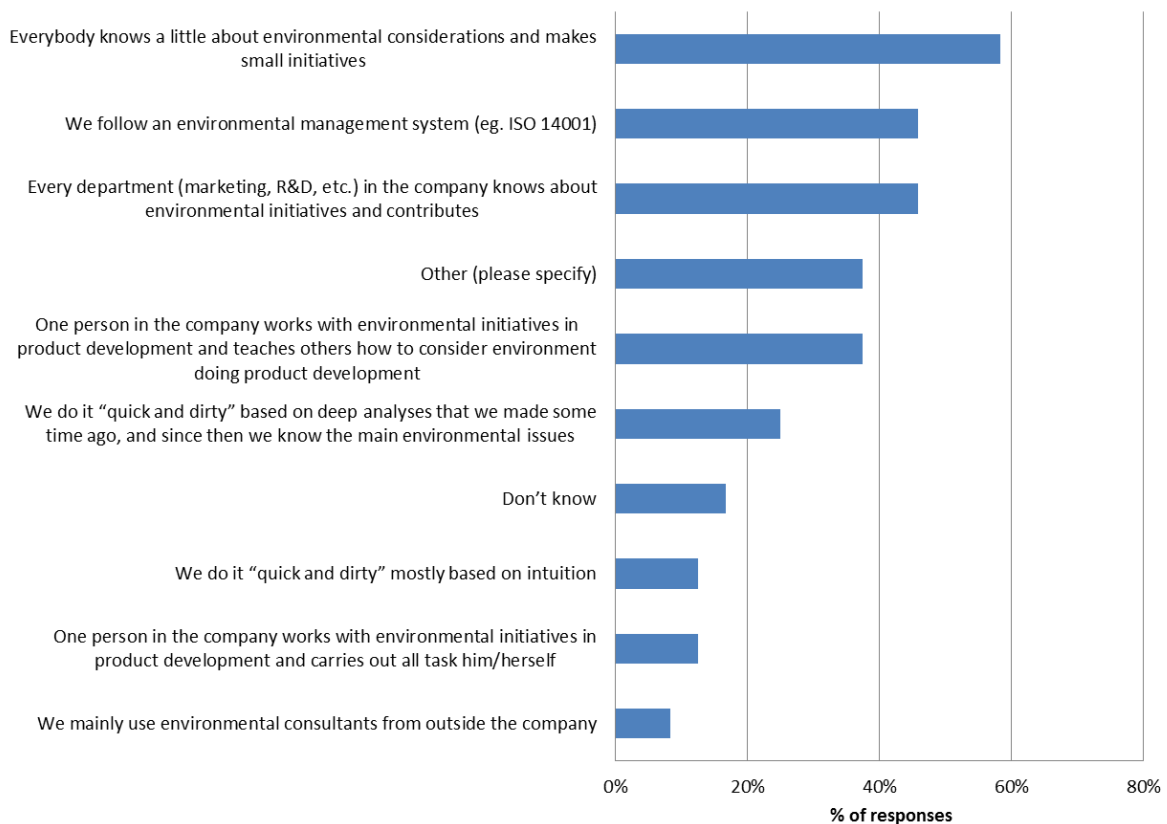


Figure 2. Responses to the question (n=24): "Which of the statements below best characterizes your company's work with environmental initiatives in product development?"

As well as ensuring a basic level of understanding of environmental initiatives across all departments and staff, 38% of companies had some kind of 'ecodesign champion' who had specific responsibilities for providing support, training and advice. The research literature suggests that the role of the Ecodesign champion is an important one in supporting the implementation of environmental initiatives, but as one respondent noted it can be difficult to find the right person with the correct mix of technical skills and knowledge (e.g. ecodesign, Life Cycle Assessment, product development process etc.) along with the necessary interpersonal skills to communicate, engage and inspire. It is perhaps for this reason that external consultants were mentioned by respondents, who it seems are primarily being used to help train staff so that the company can eventually develop the competences it needs in-house, rather than remaining reliant on external support.

Unsurprisingly, top management was also seen by many respondents as an important group to involve in environmental initiatives. For example, 75% of respondents agreed or strongly agreed with the statement, "It is a driver for us that the company management have a quest for a better environment". But as one participant noted, senior management need to do more than provide verbal support for environmental initiatives: "...Unless top-management turns from supporting sustainability, to running the agenda as an integral part of corporate strategy, product developers often find themselves suffering from too many constraints to really do an innovative and effective job."

Finally, companies also need to be considering who they need to involve in their environmental initiatives from within their value chain. Customers are one of the most important driver of ecodesign, with 45% of respondents stating that customer demand was key to them commencing environmental initiatives and 85% of respondents agreeing or strongly agreeing with the statement, *“It is a driver for us that there are customer demands for environmental initiatives in product development.”*

On the other side of the value chain, suppliers are important to engage as they often hold key information about the environmental impacts of the materials and components they provide and their support is required to make changes to the design of bought-in components. However, engaging supplier can be challenging with 17% of respondents highlighting “Sub-suppliers lacked willingness to cooperate” as one of their top barriers to implementing their environmental initiatives”. A solution to this challenge implemented by one of the respondents was to begin by training the procurement staff, which meant that these people were then in turn able to educate their suppliers on the importance of environmental initiatives and how the supplier could contribute to these.