

iMPU survey results: Competences

Implementing environmental initiatives within product development requires a variety of competencies, many of which will be new for a company. Through the survey, we wanted to find out:

- What **existing experience** did the respondents and their companies possess?
- What **sources of information and knowledge** do companies use to build new competencies?
- What are the new skills, knowledge and **competences they need to acquire**?

Existing experience

In the survey we asked: “How experienced with environmental initiatives are you personally?”. The majority of respondents (82.3%) had some level of experience with environmental initiatives, with only 17.6% of respondents declaring no previous experience (Figure 1).

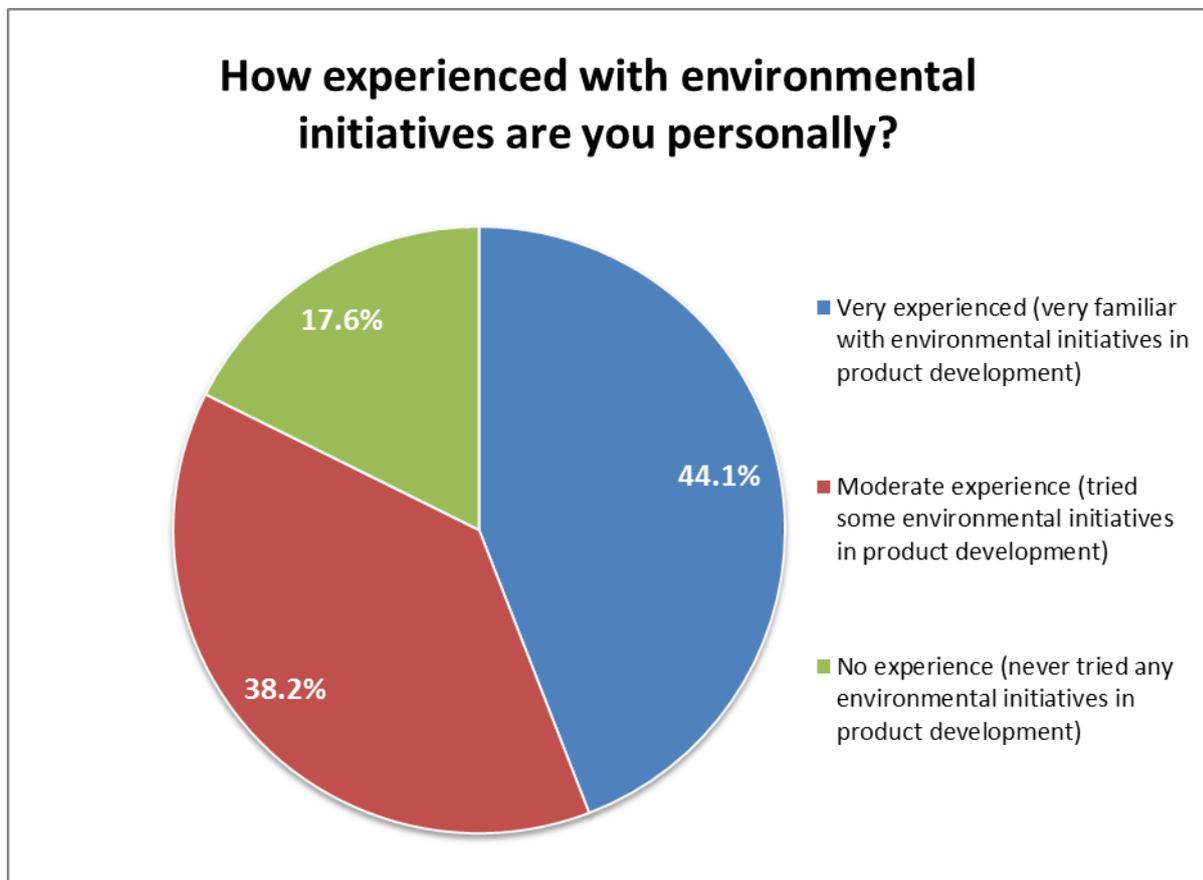


Figure 1. Responses to the question (n=54): “How experienced with environmental initiatives are you personally?”

In terms of the experience in environmental initiatives of the companies they work for, on average 8 in every 10 companies represented had some experience (Figure 2), but this is to be expected as the survey was targeted at companies and contacts with relevant experience of ecodesign who could share details of their implementation experiences. It would also be interesting in future research surveys to specifically target companies that have no experience of initiating environmental activities to learn more about why they have not tried or are not able to make progress on this topic.

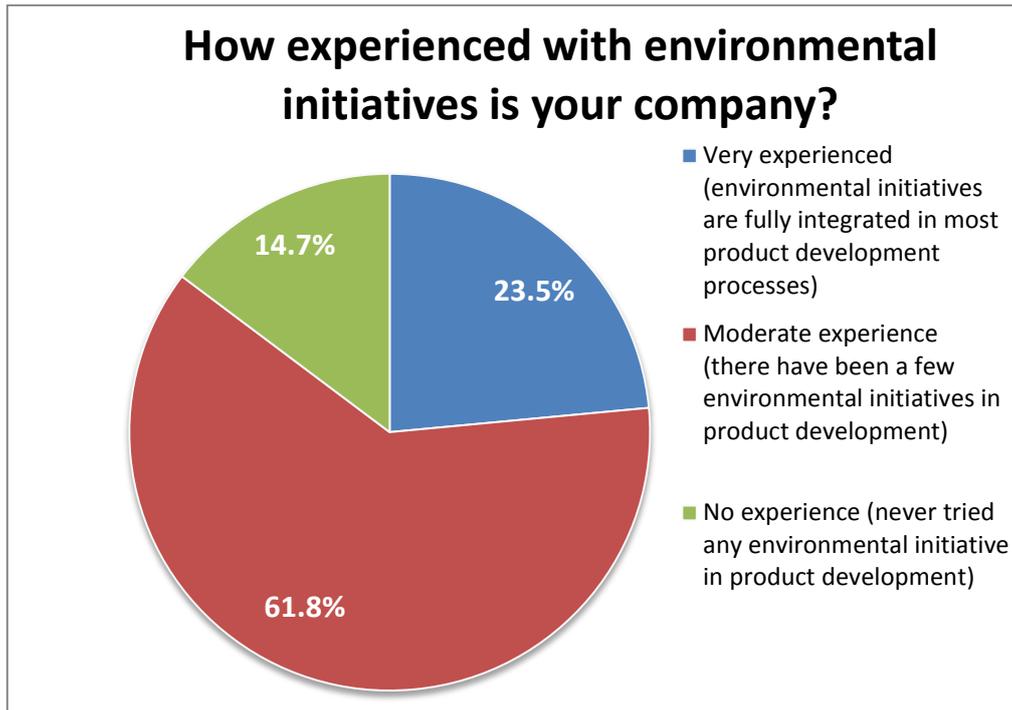


Figure 2. Responses to the question (n=54): “How experienced with environmental initiatives is your company?”

Sources of information and knowledge

A variety of sources of information and knowledge are used by practitioners to help develop the competencies they require, see Figure 3. These include courses and seminars (46%), searching books, articles and the Internet (43%) and learning from external consultants (41%). In the comments to this question, respondents specifically mentioned sources such as internal company training, knowledgeable colleagues, and the DTU/IPU [Ecodesign Guide](#). Interestingly one respondent mentioned that they had learnt a lot from being audited by some of their large customers in the electronics industry. This suggests that value chain engagement is becoming an important part of the environmental strategy of large, multi-national companies in this industry.

From where did you obtain the necessary knowledge to implement environmental initiatives in your product development process?

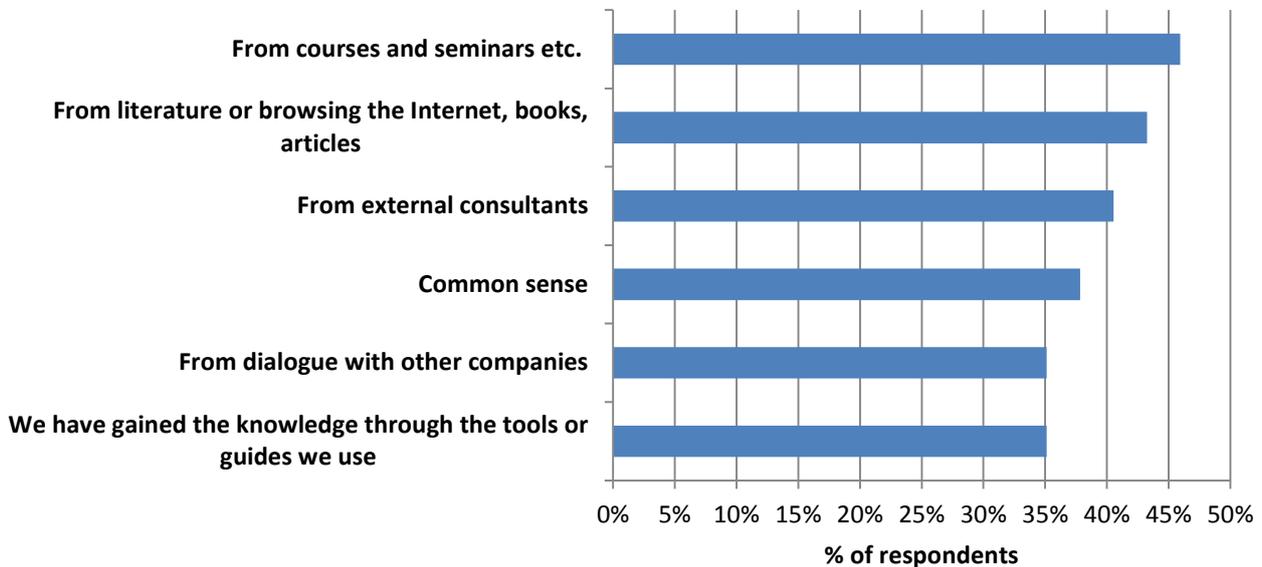


Figure 3. Responses to the question (n=22): “From where did you obtain the necessary knowledge to implement environmental initiatives in your product development process?”

Competences they need to acquire

Looking back to the main barriers to implementing environmental initiatives identified in the [Getting Started](#) section (see Figure 3 in the survey results document), it is notable that several of the main barriers could be overcome through training and the development of new competencies. In particular, topics such as *how to find information on environmental impacts* (mentioned by 32% of respondents), and *how to select alternative materials and components to reduce environmental impacts* (27%) are both competences that designers and engineers could acquire through short training courses and the right supporting environment in which to apply these new skills and knowledge.

It would be more challenging to develop competences to address some of the other barriers highlighted such as, “*When the easy environmental improvements had been carried out it became very difficult to continue to the next level*” (20%) and “*Trade-offs too difficult to balance (e.g. Lower chemicals use bring higher energy use)*” (20%). These topics are more fundamental design and innovation issues.

To address these issues may require a change in the product development process of the company, to encourage the consideration of environmental issues much earlier in the process, where there is scope to explore more radical solutions that will deliver a step-change improvement in environmental impact reduction and tackle the performance trade-offs that become more difficult to avoid the further your progress through the product development process. This implies that a competence that companies struggling with these types of issues might benefit from developing is how to incorporate environmental considerations into the early stages of product development – see the section on [Organization](#) for further discussion on this topic.