

Chapter 9: Next Steps

Now what? Given all of the information in this guide, it might be hard to figure out exactly what to do, or do differently, on the proverbial Monday morning. Developing your skill in sustainable design will take some time, but there are plenty of ways to put these tools and techniques into practice immediately.

If your company or industry has any sort of sustainability scorecard, use it to assess your current design or an existing company product or component. If there isn't a specific scorecard that applies to your context, one like the 3M example given earlier or the LiDS Wheel can work. More important than getting it "right" at this point is determining what is difficult to score and what is more straightforward. Did you have enough information? If so, where did it come from and is it reliable? If not, how would you find it? Once you have done this for one product, do it for another one or for a design idea to get comfortable using these methods to compare options. If you are at a loss for examples use some general ones, such as glass bottles versus plastic ones, or paper bags versus plastic ones. A little research should turn up enough information about those products to get you started.

An easy place to start with data-based life cycle analysis is with the downloadable SolidWorks models, if you're a SolidWorks customer and user. If you have SolidWorks, you can use SustainabilityXpress for SolidWorks parts, since it's a standard component of the software.¹ There's value in learning to use the software, but more importantly, you can start to see the impacts that your various design decisions have on the environment. This is a good way to test your intuition as well. Are there environmental impacts from some materials that surprised you? Is there a greater or smaller difference between options than you would have thought? Most sustainable design entails narrowing down options and making trade-offs, so the more you have a basic feel for some of the impacts the easier it will be to find those changes that are meaningful and significant.

Once you have developed some familiarity with the concepts, frameworks, and design and decision support tools, it is important to incorporate them as often as possible, even when others aren't. There is nothing wrong with having greater insight into your products than is expected. Hopefully, however, you will be able to discuss the impacts and implications with your fellow designers as well as others in your organization and its partners.

For those who want to be acknowledged as proficient with SolidWorks Sustainability, there is a two-level certification program under development. You may be familiar with the traditional Certified SolidWorks Associate (CSWA) and Professional (CSWP) certifications; SolidWorks is developing analogous certifications for sustainable design, the Certified Sustainable Design Associate (CSDA) and Certified Sustainable Design Professional (CSDP). Stay tuned for more information—and if you've managed to read through to this section, rejoice in the fact that you're armed with enough knowledge to pass the CSDA!

¹ SustainabilityXpress is included starting in SolidWorks 2010. Users of SolidWorks 2009 can download it through the [SolidWorks Labs website](#).

If you are interested in becoming an LCA expert, there are numerous guides and courses that can develop the in-depth knowledge of the LCA process. Once you have gained hands-on experience, there is an exam-based qualification program developed by The American Center for Life Cycle Assessment for those interested in being designated as an LCA Certified Professional (LCACP). Note that the focus of this sort of LCA expertise is on assessment, and not on product design and development processes.

Lastly, try to connect with other developers, designers, and engineers working to incorporate sustainability principles into their work. There is a great deal of research about sustainable design available and underway, with plenty of academics interested in exploring the topic. There are professional networks and organizations around the world. There is a partial list at the end of this guide to get you started, but more are arising all the time. Whether you have come to this guide because you wanted to or because you had to, you will find that there are plenty of people who can guide you and resources that can help you succeed at sustainable design.