Putting the metrics behind sustainability at DSM.

LCA updates for Eco+ Program

The challenge

DSM is a leading innovator in the fields of nutrition, health and sustainable living. To continuously improve the environmental performance of their products, DSM regularly updates the impact assessment studies of their portfolio. When faced with a high workload for their in-house life cycle assessment (LCA) experts, DSM chose PRé to ‘refresh’ some of the comparative studies, since we are a trusted partner. For DSM, which has established procedures for conducting LCA studies, an important issue was consistency with the internal requirements and best practices. They also wanted the guidelines for the chemical industry from the World Business Council For Sustainable Development (WBCSD) to be followed. In practice, that meant reporting few sets of results, including carbon footprint, WBCSD indicators and internal Eco+ assessment.

By inviting an external party to update their LCAs, DSM were able to benchmark internal processes against those of a leading external partner to identify improvement opportunities, while maintaining confidence in the robustness of the results and conclusions.

Business value

- Improved model: the original model was updated and refurbished by an LCA and SimaPro expert. The improvements make the future updates less time-consuming for DSM and more automated, minimizing the risk of mistakes.
- Benchmarking: the studied products were benchmarked with alternatives in that market segment. This brought insights about their relative environmental performance.
- Validity of previous studies: the updates made it possible to check the validity of conclusions derived from the previous studies. On that basis, product development or communication can be adjusted, if necessary.
- Improvement opportunities: for the technical department, the updated LCA is the source of valuable information about improvement opportunities for the products. The outcomes show where eco-design can make a meaningful difference.

PRé solution

We updated the background datasets and product formulations in original DSM model with more recent data. In addition, we also introduced some improvements into the models. For instance, any copies of the background datasets were replaced by links to the original data sources. The benefit of this is that in the future, when e.g. ecoinvent will be updated, the DSM model will automatically link to the latest version of those datasets. This makes future updates of the LCA studies easier and quicker.

For the reporting, we followed the internal templates used at DSM, assuring that all the assessments required by WBCSD and DSM are presented and discussed in an understandable manner.
Creating business value through sustainability metrics

Sustainability metrics consulting
Sustainability in business has become a core business concern and a driving factor in creating business value. PRé offers a range of consulting services, provided by a team of experts who will work with you to choose, create and deliver the right metrics for your sustainability goals.

Developing innovative new metrics for new challenges
Societal and stakeholder expectations for implementing sustainability in business are becoming more demanding. Sometimes, off-the-shelf metrics cannot help you answer their questions. PRé has extensive experience in life-cycle-based metrics pioneering, implementing cutting-edge new product metrics and developing completely new, scientifically sound and robust metrics. PRé has been the driving force behind many ground-breaking initiatives like ReCiPe or the Handbook for Product Social Impact Assessment.

Integrating sustainability metrics in your business
To create business value from sustainability, your business needs to integrate sustainability metrics across its business functions. You can’t improve what you can’t measure. PRé has the expertise required to help you choose the right metrics and to integrate sustainability into your day-to-day operations. PRé also supports you in increasing the efficiency of your LCA work and in empowering your LCA practitioners.

Expert LCA knowledge to measure sustainability performance
LCA has proven to be a robust and science-based way to measure and communicate your sustainability performance. PRé can review your LCA studies, deliver EPDs, footprints and other metrics, and provide you with completely new LCA studies to measure your impact. Our consultants are renowned for their expertise in specific topics, such as impact assessment, uncertainty, normalisation, toxicity, social sustainability and databases. PRé offers training courses and in-house training that build a solid knowledge base to help you conduct LCA studies yourself.

Market-leading businesses that create value from sustainability metrics
PRé has built a worldwide reputation as a leader on environmental and social impact assessment. We work with organisations and institutes such as the European Commission, European Space Agency, Heineken, Philips, L’Oréal and DSM.

About PRé
PRé has been a leading voice in sustainability metrics and life cycle thinking, since 1990, pioneering the field of product and supply chain sustainability metrics. We’ve developed some of the world’s most widely recognised and applied environmental impact assessment methods, as well as the world’s leading LCA software, SimaPro. From the very first, we have not only focused on developing the science of LCA, but also its application – helping companies create value by using state-of-the-art measuring, monitoring and analysis methodologies to improve their sustainability performance.

Get in touch

We are happy to hear from you and discuss your sustainability challenges and opportunities.

PRé Consultants bv
Stationsplein 121
3818 LE Amersfoort
The Netherlands

+31 33 450 4010
consultancy@pre-sustainability.com
pre-sustainability.com