

# Putting the metrics behind sustainability at PROSUITE.



## PROSUITE



### Sustainability impact assessment of technology: a novel methodology

#### The Challenge

New technologies are constantly being developed, driving progress and change. Because technology has the capacity to drastically change our lives - and not always for the better - it would be invaluable to know how sustainable a new technology is, before it is introduced. This would help prevent new inventions from sparking controversy in terms of the net benefit they bring to society.

Thorough sustainability impact assessment is generally accepted to focus on three pillars: social, environmental and economic sustainability. This is known as the 'triple bottom line' of people, planet and profit. Many methods for assessing the sustainability of products and services exist or are still being developed. These approaches have their merits, but cannot be applied in a generic way to assess all aspects of sustainability for a new technology. What was missing was an objective way to evaluate whether a technology helps to address important sustainability challenges and whether it creates new ones. The PROSUITE (Prospective Sustainability assessment of Technologies) project was set up by the European Commission as part of the 7th Framework program to fill these gaps.

#### PRé Solution

In the PROSUITE project, researchers from all over Europe collaborated to develop and test a coherent sustainability impact assessment methodology for technology. PRé was involved in the development of both the software and a social impact assessment methodology. Together with researchers from other institutions, PRé developed an impact assessment method for social well-being. These new sustainability metrics include both quantitative and qualitative indicators for social well-being, such as total employment, risk perception, child labour and global inequalities. PRé contributed to the development of the PROSUITE software by organizing a stakeholder consultation and implementing a number of basic engineering modules into the decision support system. These modules were based on criteria supplied by other project partners and can be used, for example, to calculate the energy requirements of pumping a specific liquid over a certain height.

Finally, PRé wrote the PROSUITE Handbook that summarizes the results of the project. The Handbook provides basic guidance for decision makers interested in the sustainability impact assessment methodology, and gives links to more detailed information.

#### Business Value

The PROSUITE project resulted in the creation of a new methodology of sustainability impact assessment, specific to technology. Instead of the three pillars mentioned earlier, PROSUITE takes five pillars into account: human health, social well-being, natural environment, exhaustible resources and prosperity (Figure 1).

The deliverables to which PRé contributed include:

- A social impact assessment methodology, including both quantitative and qualitative sustainability metrics
  - Implementation of the basic engineering modules in the decision support system
  - A handbook describing the novel PROSUITE methodology, the steps that need to be taken and where to find more detailed information
- For more information, please visit the PROSUITE website ([www.prosuite.org](http://www.prosuite.org)).

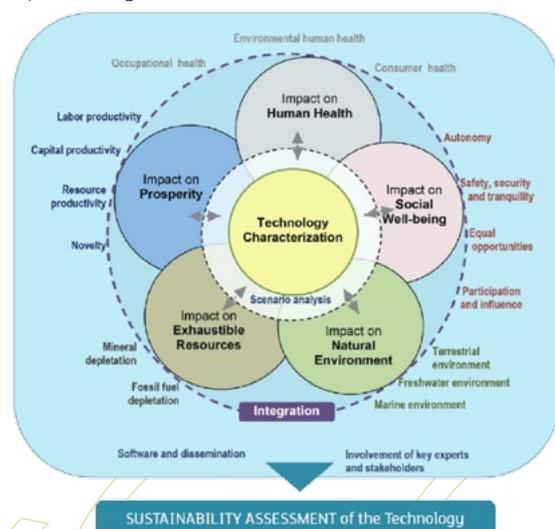


Figure 1 – Overview of the PROSUITE methodology



## 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.

### **PIONEERING** 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.

### **INTEGRATION** 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.

### **DELIVERY** 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.

**Get In Touch With PRé**  
We're always happy to discuss your sustainability challenges with you. If you have any questions, feel free to contact our offices in the Netherlands and the US.

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*We look forward to being your partner in putting the metrics behind sustainability.*

[pre-sustainability.com](http://pre-sustainability.com)

### Those Who Have Gone Before – Market-leading Businesses That Are Creating 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, BASF, 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.

Find out more about what we can do for your organisation at [www.pre-sustainability.com](http://www.pre-sustainability.com)

