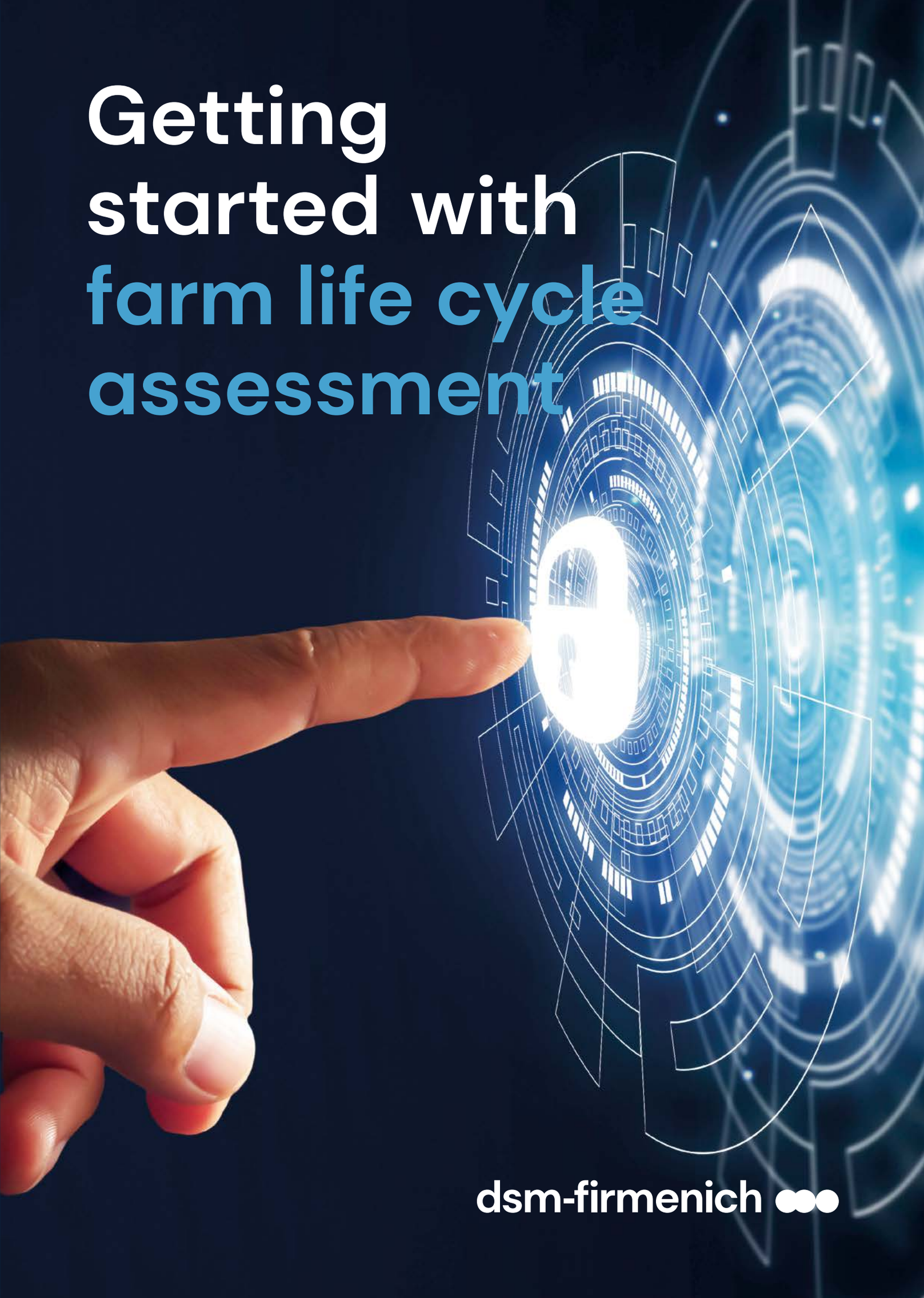
Getting started with farm life cycle assessment

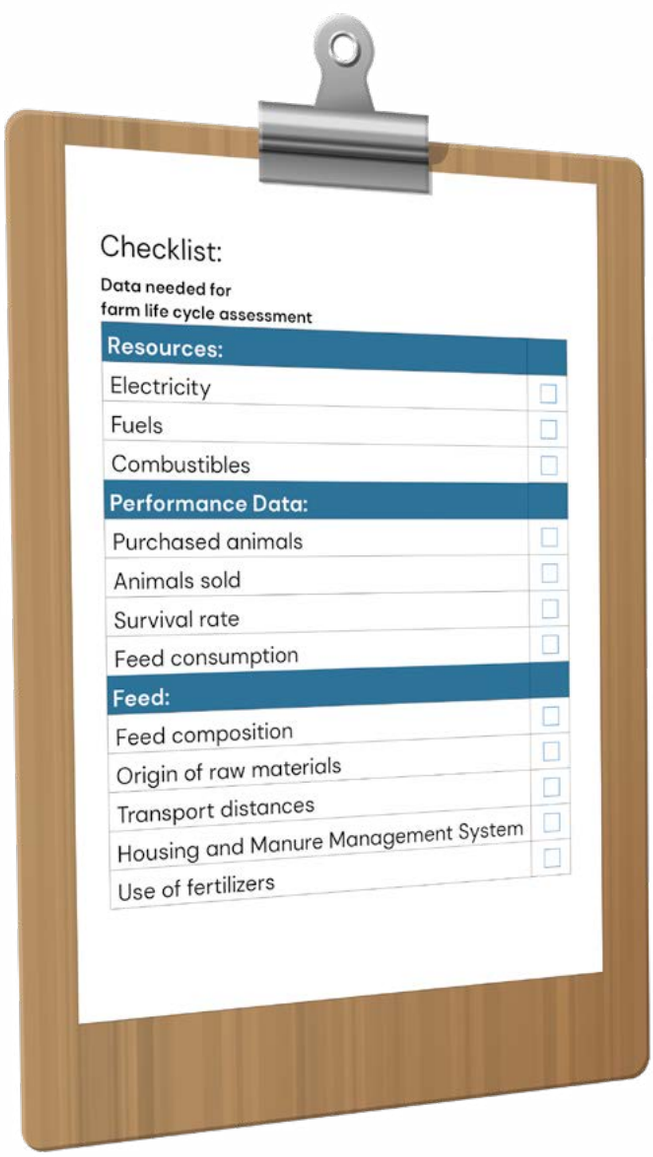


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Unlocking the opportunities related to sustainable animal protein starts with measuring your environmental footprint. This guide will help you navigate the complexities of Life Cycle Assessment (LCA) and take meaningful steps towards a more sustainable future.

The need to measure animal protein sustainability

The trend is clear: there's a growing demand for eggs, meat, milk and seafood. As farm animals now account for 14.5% of human-made greenhouse gas emissions, we need to produce animal protein more sustainably. This means measuring and improving the footprint of farm animals. To do this, we must use reliable and scalable measurements called life cycle assessments.



Data collection

Conducting a life cycle assessment for a farm involves collecting and analyzing a wide range of data. This data helps to provide a comprehensive picture of the farm's environmental impact, from resource use to waste production.

To help you get started, we've compiled a checklist of the key data needed to conduct a farm LCA.

Tools and services

Conducting a life cycle assessment for a farm can be a complex process. Consultation services and software solutions are commonly used to assist you.

Bespoke Consultation Services

These services offer personalized guidance tailored to your specific needs. They can help you navigate the complexities of LCAs and provide expert advice on every step of the process. Specialized companies offer consultation services that can help you identify business and production climate risks, opportunities for mitigation, and strategies for implementing sustainability measures in supply chains. While consultative services can be personalized, they essentially capture a point-in-time analysis. Updating the results regularly can be cost prohibitive.

Software as a Service (SaaS) Solutions

SaaS solutions provide software platforms that can guide you through the LCA process. These tools can help you set environmental targets, monitor sustainability key performance indicators (KPIs), and comply with national and international legislation. These platforms offer robust LCA databases and reporting features to help you interpret, use, and share results and environmental insights across the value chain.

A SaaS LCA solution is typically more cost effective than consulting. It also allows for more regular assessment to be done quickly and gives you deeper insight into farm performance and sustainability.

However, not all SaaS platforms are the same. The best ones are easy to use, easy to understand, credible and accurate. They will also work well with existing systems e.g. interconnectivity with least cost formulation (LCF) software or fast data import/export functionality. User support can be important. Leading SaaS LCA providers tend to offer additional options for farm technical expertise to help you get the most value from your results.

Updates and continuous improvement

LCAs are not a one-time process. They should be updated regularly as new data becomes available or as practices on the farm change.

The environmental impact of a product or process can change over time due to several factors, such as advancements in technology, changes in production methods, or shifts in supply chains.



Regular updates are necessary to ensure that the assessment remains accurate and reflective of the current situation. This involves collecting and incorporating new data, adjusting calculations based on improved methodologies, and considering any changes in the environmental practices associated with the product or process being evaluated.



Key stages of a LCA

Life cycle assessments follow a 4-step process backed with scientific methodologies, as shown in Figure 1.

Remember, a life cycle assessment can be a big job and there's a lot to think about. It can be helpful to use special software or talk to an expert.

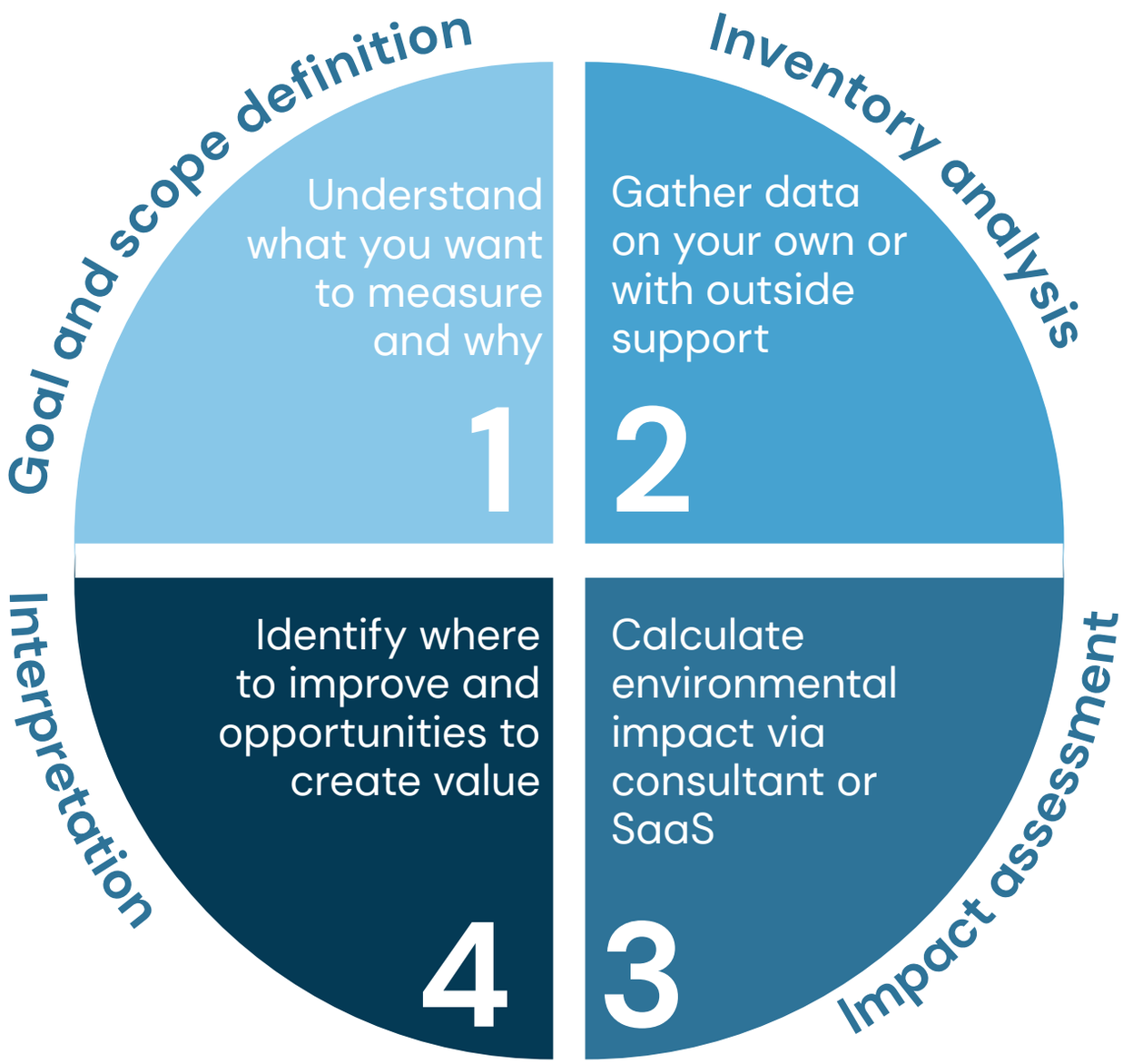


Figure 1. Overview of a farm life cycle assessment
Source: dsm-firmenich

Conclusion

Regular life cycle assessments of animal protein are becoming a requirement for the entire value chain. This guide breaks down the process into key stages, helping you define goals, analyze your farm's resources, and interpret the results for practical improvements. Whether you opt for personalized consultation services or user-friendly software solutions, be aware of the importance of regularly updating your LCA footprint as practices evolve and new data appears. This ongoing commitment ensures that your assessment stays accurate and helps you make informed decisions for a more environmentally friendly and sustainable farm.

Remember, every journey starts with a single step, and every change, no matter how small, can make a big difference.


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