EBP⊚

SALCA-Future: web app for lifecycle assessment in the agricultural sector

Lifecycle assessments can be used to ascertain the overall environmental impact of products and services. Working on behalf of Agroscope, EBP developed a web application that can be used to generate lifecycle assessments for farms, foods, and agricultural products.

A lifecycle assessment (LCA) is a systematic analysis of emissions generated and resources consumed over the entire lifecycle of a product or service. The Lifecycle Assessment Research Group at Agroscope specializes in drafting agricultural lifecycle assessments (Swiss Agricultural Lifecycle Assessment, SALCA). In order to improve the efficiency and quality of its data-collection, analysis and evaluation processes, Agroscope replaced its previous tool with the new application SALCAfuture.

Easy data collection . . .

Lifecycle assessment specialists use SALCAfuture to create project-specific data-entry forms. Farmers then use the web application to record the relevant data for their farms. The system validates the input data according to predefined rules, thereby ensuring a high degree of data quality.

. . . and efficient analyses

The recorded data are made available for further analysis via a programming interface. Using their own modules, lifecycle assessment specialists can then access the data and calculate, for instance, direct farm emissions. Additionally, the system makes various interfaces available for importing data into, and

Client

Agroscope

Facts

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Project Country	Switzerland

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exporting data from, the system.

Services provided by EBP

EBP provided the following services:

— Requirements engineering for SALCAfuture
— Development of a solution concept
— Development of the web application
— Introduction of the application into the Agroscope IT
  landscape

SALCAfuture was developed using C#/.NET and Angular.
Calculation modules are created in Python.
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