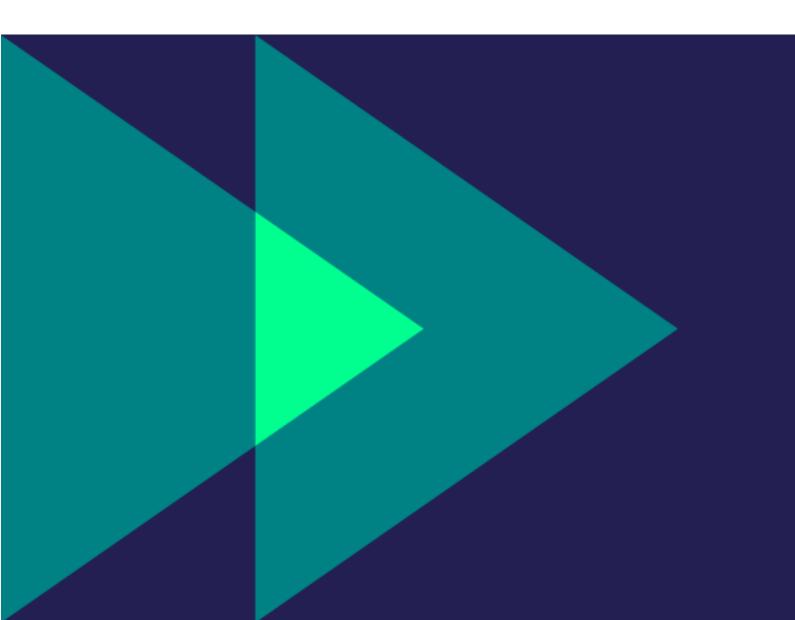
VALDATION REPORT

Rúmina 2022 #665





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Details of the validation process

	Validation request	First review	Feedback call	Hand-in revisions	Final review	Wrap-up call
Date	02/08/22	18/08/22	29/08/22	29/08/22	02/09/22	25/10/22
Result	PLAUSIBLE, POSITIVE WITHIN LIMITS AND SIGNIFICANT			VALID, POSI	TIVE AND SIG	NIFICANT

Colofon

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Introduction and definitions

This Validation report documents the Validation of a Climate Impact Forecast:

Validation is a review process performed by an impartial impact expert to determine if a CIF is Valid, Positive and Significant.

The Validation process usually takes two weeks and includes a first review, a first feedback call between the team and validator, time for revisions if needed, a final review and a final results call. For a detailed description see www.impact-forecast.com/cif-validations

The review comprises a structured check using our CIF Validation tool, a sensitivity analysis and the writing of an Impact story. CIF trainers with LCA expertise are trained to perform this process in a uniform and objective way.

CIF Validations are made on the request of the project team, and possibly commissioned by an impact organisation. The results are used by teams and organisations to compare and communicate the climate impact of projects. A Climate Impact Forecast or CIF is an LCA based calculation of the GHG reduction or climate adaptation potential of a project. Using our CIF tool, the project team found the net climate impact of the key differences between business as usual and their innovative solution.

The Impact data in this report, and in CIF in general, is calculated with information from the project team and from the CIF tool. Technical details, amounts and assumptions in the calculation are provided by the project team. Impact factors (LCI data), impact equivalents and the calculation itself are provided by the CIF tool.

The CIF tool is used by teams to improve their impact and support design and business decisions with impact data.

CIF results are the project's potential or actual avoided emissions in tCO₂eq.

Every CIF Validation result consists of three independent outcomes:

Valid

A CIF is valid if it is representative of the project, using appropriate data and well justified assumptions. Therefore, the CIF and its results are representative of the potential for the project to mitigate, enable or adapt to climate change.

Detailed requirements for validity are specified on www.impact-forecast.com/ cif-validations. A CIF can be Valid, Plausible, Improbable and Invalid.

Positive

A CIF is positive when it shows that the project has a lower climate impact than business as usual, or improved climate resilience in the case of adaptation. A positive mitigation or enabler CIF shows the avoided GHG emissions in -tCO₂eq.

This outcome depends on a sensitivity assessment. CIF results can be Positive, Positive within limits, Unclear, Sensitive and Negative.

Significant

A CIF is significant when the project has a climate impact (positive or negative) greater than 5 tonnes of CO₂eq per year. This is roughly the global average annual CO₂ emissions per person, and the mass of a male African Elephant.

The threshold for significant impact can be set to a higher amount for a particular organisation or occasion. The result can be Significant or Marginal.

Impact story

An impact story is a summary of how a project makes a positive climate impact. It is written by the validating impact expert and contains the key impact data from the Climate Impact Forecast.

SAVE MILK TO SAVE EMISSIONS

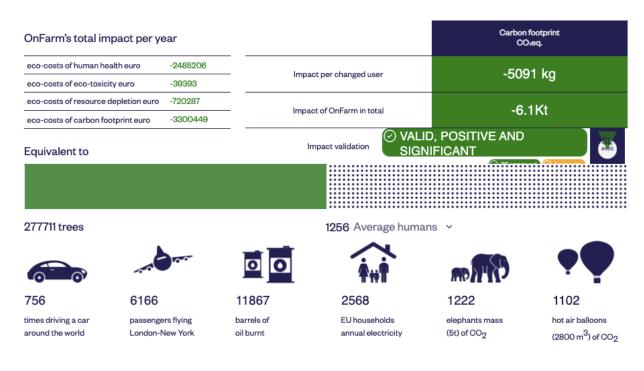
Bovine mastitis is a common infection of the udder tissue in dairy cows, and the costliest disease within the dairy industry [1]. It is responsible for 80% of antibiotic utilisation in the industry [2]. Once a cow experiences mastitis, the most common treatment is with antibiotics. The farms spend money on the treatments while being forced to also discharge the milk on average for 7 days.

However, 30% to 50% of mastitis causes could be auto-limited. Therefore, the early diagnosis of the particular microorganism causing the infection can avoid the use of unnecessary treatments with antibiotics, as the cow will recover by itself [2].

OnFarm provides this solution by hardware which identifies the pathogen causing the infection, and the software (OnFarmApp) informs whether there is a need for an antibiotic treatment or not. With OnFarm solutions the farmers are saving money and discharging less milk. OnFarm helps the farmers to be more sustainable as less milk is being wasted and discharged in the environment.

OnFarm enables Dairy Farmers (averaging 50 lactating dairy cows) to rational use of antibiotic treatments for mastitis, providing hardware and software solutions in order to identify only the clinical mastitis cases caused by bacteria that need antibiotic treatment. The difference in impact of OnFarm per year is calculated assuming that 2,000 Dairy Farmers (averaging 50 lactating dairy cows) are reached, of whom 80% are expected to change on average 75% of their current treatment of all clinical mastitis cases. That is equivalent to 1,200 fully changed users.

The total climate impact of OnFarm is -6.1 $ktCO_2e$ per year.



Validation quality mark can be checked on: www.impact-forecast.com

