



EFPRA

European Fat Processors
and Renderers Association



Case Study 3

EFPRA carbon footprint study of ABP derived products and plant-based alternatives

EFPRA wanted to ensure that their products remain competitive and that they play an active role in the sustainability discussions of the animal-based food supply chain. The Global Feed LCA Institute (GFLI) initiative is a harmonised approach in the quantification of the environmental impact of feed ingredients. It was chosen as the most suitable mechanism to present average, representative industry data to the public.

EFPRA commissioned a carbon footprint study to understand the environmental indicators for animal fats and meals for the GFLI database using operational data from EU ABP processors. The

June 2020 study report has been externally peer reviewed and the approved data is available on the GFLI's database along with an accompanying GFLI article.

There are some very positive conclusions from the study when comparing the carbon footprint of PAPs and animal fats with imported soybean meal and palm oil. For example, the study found that the higher protein content of PAPs compared to vegetable-based protein alternatives amplifies the carbon footprint benefit so PAPs could displace significantly more soybean meal, depending on the desired feed formulation.

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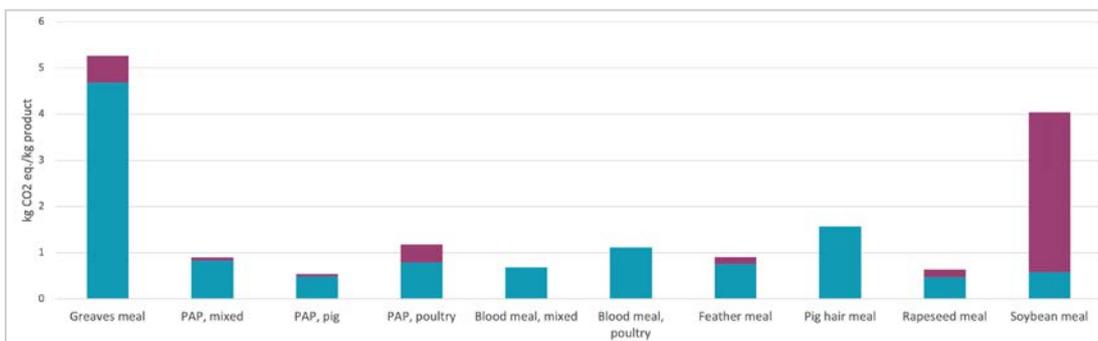
Figure 1 below compares the climate change impact per kg protein for PAPs and their plant-based alternatives (economic allocation). It shows that non-sustainably sourced vegetable-based alternatives such as soybean and rapeseed, overall have a higher carbon footprint than the ABP derived products.

Soybean cultivation is associated with deforestation activities in Southeast Asia and South America over the past 20 years and is reflected by the relatively high contribution of land use change (LUC) to climate change

impact. The vegetable-based alternatives include a share of the agricultural activities associated to their production, which is not the case for ABP based products, where the majority of agriculture and animal farming impact is allocated to fresh meat production.

Figure 2 compares the climate change impact per kg product for animal fats and the plant-based alternatives (economic allocation) and shows that the carbon footprints of animal fats compare favourably to vegetable oils due to similar reasons as for the protein meals.

Carbon footprint comparison of protein meals



Carbon footprint comparison of fats and oils

