

# Summary

## Assessment of Climate Impact in Food Products

Erhvervslivets Tænk tank (former Axcel Future) has conducted an analysis to investigate the climate impact of food products made with plant-based ingredients compared to similar products with animal-based ingredients. The analysis focused on the CO<sub>2</sub>e emissions of the ingredients as well as energy consumption related to transport and production processes, and it included the following products: mayonnaise, confectionery, pizza cheese, and burger patties.

The results show that whole or partial substitution of animal-based ingredients with KMC's plant-based alternatives generally leads to a reduction in CO<sub>2</sub>e emissions, and the extent of this reduction varies depending on the product type and ingredient composition.

### Mayonnaise

Mayonnaise based on KMC's ingredients indicates a reduction in CO<sub>2</sub>e emissions of between 1.1% and 4.4% compared to the reference product.

### Confectionery

For confectionery, the reduction is greater, with a decrease of between 3.8% and 26.5% for products based on KMC's ingredient composition compared to the animal-based reference product.

### Pizza Cheese

For pizza cheese based on mozzarella, products made with KMC's ingredients emit between 4.7% and 63.4% less than the animal-based reference product. For pizza cheese based on rennet casein, products based on KMC's ingredients emit approximately 9.5% to 40.3% less than the animal-based reference product.

### Burger Patties

The investigation of burger patties shows a significant reduction in CO<sub>2</sub>e footprint, where the use of plant-based ingredients from KMC results in a reduction in CO<sub>2</sub>e emissions of up to 95.9% compared to the reference product for traditional beef-based patties.

Overall, the use of plant-based substitution ingredients contributes to a reduction in CO<sub>2</sub>e emissions in food production. The values for the CO<sub>2</sub>e footprint of the various ingredients are based on an overall calculation that depends on the ingredient composition, process energy consumption, and transport energy consumption, which can naturally vary and should be adjusted accordingly.