

## COMPARISON OF SUSTAINABILITY OF CAMELINA BASED BIODIESEL AND HYDROTREATED FUEL

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Transport in the EU produces 21 % of greenhouse gas emissions, of which 90 % is from road transport. Alternative sources of raw materials for fuel production are being sought. In addition to technical interchangeability, other requirements for sustainable production and consumption must be met. One of the partial solutions is the production of advanced biofuels from non-food raw materials and waste. One of the possibilities for the rapid introduction of advanced biofuels is the cultivation and use of the plant *Camelina sativa*, sp., which is a domestic plant species and its use has been intensively studied worldwide in recent years. In this work, variants of sustainability of possible production of methyl esters of partially hydrogenated camelina oil (CO) and synthetic component of diesel fuel prepared by hydrogenation deoxygenation in the co-processing process were compared. Sustainability calculations were performed using the Biograce program using data from semi-operational tests of camelina cultivation at NPPC Vígľaš (National Agricultural and Food Centre), data from the literature and own results from the research of transesterification and hydrodeoxygenation of CO. In all variants of the calculation, higher sustainability was achieved compared to the use of rapeseed oil.

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