

<https://doi.org/10.7250/CONNECT.2024.043>

# THE IMPACT OF RED III DIRECTIVE ON THE USE OF RENEWABLE FUELS IN TRANSPORT ON THE EXAMPLE OF ESTONIA

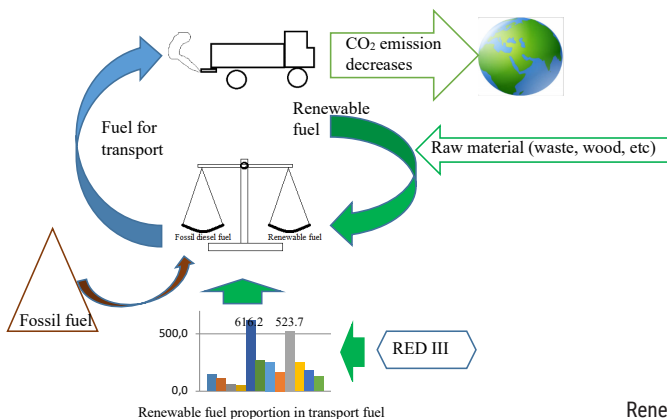
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**Abstract** – Over the past two decades, there has been an increasing use of biofuels worldwide, especially in Europe. The main objective is to reduce greenhouse gas emissions, particularly carbon dioxide (CO<sub>2</sub>), from transportation. The regulation of fuels produced from biomass and other renewable sources at the EU level is primarily governed by the Renewable Energy Directive (RED). As of today, RED III directive has come into effect, significantly altering the EU fuel market by 2030. The main change involves an increase in the share of renewable fuels in transport and the non-use of first-generation fuels. Since all EU member states are obliged to comply with the RED III directive, it is essential to assess the current status of each member state in meeting the requirements for transport fuels. Therefore, the aim of this article is to analyse the impact of the RED III directive on the use of renewable fuels in the transport sector. Specifically, it provides an overview of various RED directives' requirements, analyses the shares of renewable fuels in fossil diesel in Estonia under different RED III compliance scenarios, and presents an overview of the situation regarding the use of renewable fuels in Estonia. The article is based on literature review, and fuel share calculations are based on RED III directive calculation methodologies. The results of the study indicate that if the requirement for the share of renewable energy used in transport is 29 %, using only HVO (Hydrotreated Vegetable Oil) to achieve this goal would require replacing 30.3 % of diesel with HVO. In cases where there is a requirement to reduce the greenhouse gas emission intensity of fuels in the transport sector by at least 14.5 % by 2030, the volumetric share of HVO fuel must meet certain criteria based on the raw material. For example, fuel produced from residues must contain a minimal amount of biocomponents. In this context, biologically derived oil is initially used, particularly in food preparation. Subsequently, after its use in food preparation, it is processed into fuel. The article also addresses cases where biogas is introduced as a renewable component in replacing diesel.

**Keywords** – Biofuel proportion in fossil fuel; biogas; different biofuel proportions; GHG emissions; HVO; raw materials for fuel; Renewable Energy Directive; renewable energy politics in transport



Renewable fuel proportion in transport fuel.