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INTERNATIONAL WORKSHOP
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“INTEGRATING CLEANER PRODUCTION INTO SUSTAINABILITY STRATEGIES”

Towards a Cleaner Vehicle Fleet: the Dynamics of the Swedish Biofuel System

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Abstract

The study's overall objective is to present how the development of the Swedish biofuels system impacts the achievement of the European Union's target of 10% of renewable fuels in transport by 2020 and the establishment of a vehicle fleet independent of fossil fuels by 2030. The methodological approach is based on a combination of forecasting and backcasting scenarios. This cross-analysis is used to relate one set of data with others in order to identify gaps between the potential energy use in the Swedish domestic transport sector with the country's desired targets. Our analysis shows three gaps related to i) infrastructure and management capabilities for local biofuel production, ii) policy instruments to trigger systemic changes to reduce dependence of imports, and iii) investment decisions. In order to bridge those gaps, policymakers have to decide on how to steer the system's development not only by combining different pathways between different growth patterns of the Swedish biofuel system but also deciding either to apply supply or demand pressures onto the system as driving forces. These choices have to be taken in a very short-run in order to shape the development of the Swedish biofuel system away of failing the target of establishing a vehicle fleet independent of fossil fuels by 2030.

Keywords: *Biofuels, bioenergy systems, transport sector, Sweden.*
