

INTERNATIONAL WORKSHOP ADVANCES IN CLEANER PRODUCTION

"KEY ELEMENTS FOR A SUSTAINABLE WORLD: ENERGY, WATER AND CLIMATE CHANGE"

Environmental Assessments of Transportation Biofuels in Europe: A Survey

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Abstract

A substantial transportation biofuels sector is present in the EU-27 countries raising controversy about their environmental impacts. A survey of the literature regarding assessments of these impacts is presented, following a brief outline of the EU-27 biofuels production. The main assessments' results, based on extensive search in sources of scientific evidence and information related to the paper's topic, are cited and compared, combined with a discussion about these findings. Several conclusions are drawn and comments are made regarding, among others, the "splash and dash" system of European biodiesel, the uncertainty in the parameters related to LCIA of biofuels, the economic basis of their environmental impacts, the insufficient treatment of the land use impact category, etc.

Keywords: biodiesel, bioethanol, environmental impacts, LCIA