



INTERNATIONAL WORKSHOP ADVANCES IN CLEANER PRODUCTION

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

Environmental Impacts and Biodiesel Production in Pilot Scale

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Abstract

The biodiesel production in pilot scale could be accomplished with minimum environmental impact. In this work was evaluate a prototype produces at UNISC for production of sunflower oil biodiesel using Leopold interaction matrix. It was consider the process stages and the actions for minimization of the environmental impact this equipment. It was observe that after the needs environmental actions for improvement of equipment it was reduce the environmental impact during biodiesel production. Therefore, the impact in relation to order (direct or indirect), time (long, average or short term), dynamics (permanent or temporary) and of plasticity (reversible or irreversible) was reduces and, it can be observed as a positive actions control, when adopted, they had affected the ambient factors in its excellent characteristics and allow to greater the sustainability of the process.

Keywords: biodiesel, environmental impacts, pilot scale.
