

Report Introduction: Using biodiesel in public transport

1. Introduction (238 words)

Fossil fuels, such as gasoline and diesel, have been the most widely used fuels in most vehicles for over a century. However, it has long been known that using fossil fuels is not a sustainable solution, since it is a limited, non-renewable resource and produces emissions that accelerate global warming. These emissions pose a problem for public transport as well. The Helsinki Regional Transport Authority (HRT) is responsible for setting guidelines and regulations for bus operators. Hence, HRT has the power to influence the fuels used by all the buses in the metropolitan area. At present, most of HRT's buses run on regular petrol diesel. However, the City of Helsinki has set a target of reducing all

emissions by 30% before the year 2020, thus necessitating a corresponding reduction in the emissions of public transport. Although HRT has already taken measures to reduce emissions by increasing rail traffic and improving the efficiency of its buses, more still needs to be done in order to meet these stricter emission requirements.

This problem could be overcome by using biofuels, such as biodiesel, to operate HRT's bus fleet. Since biodiesel is manufactured from renewable natural resources, it would not only reduce Helsinki's dependence on fossil-based fuels but more importantly would produce 85% less emissions than would fossil fuels. This report evaluates the feasibility of adopting biodiesel as an alternative to regular diesel in all buses operating in the Helsinki metropolitan area.