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## Review of Policies and Measures for Sustainable and Energy Efficient Urban Transport

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#### **Abstract**

Sustainable and energy efficient transport of passengers and goods has become a major concern of policy makers worldwide. This paper examines the existence of policies and measures for sustainable urban freight transport in European cities. The methodology for comprehensive mapping and benchmarking of strategic policy documents and measures has been developed and applied to a panel of 129 European cities. The desktop analysis shows an extremely heterogeneous situation of logistics and mobility planning policies and planning documents adopted in Europe. Cities are mainly opting for soft measures with high impact on savings. They are trying to achieve efficiency with adequate regulation system and measures supporting the introduction of new services. Only few measures directly promoting energy savings were identified while on the other hand, various measures with indirect impact on energy consumption were recognized.

Keywords: urban transport, city logistics, sustainability, energy efficiency, policy measures

#### 1 INTRODUCTION

Despite of its important role in modern society, transport has many shortcomings resulting in congestion, pollution, CO2 emissions, noise and accidents. Transport is also the largest energy-consuming sector in the EU-28 [1–3], whereby road transport consumes 83% of total energy consumption in transport and accounts for 93% of CO<sub>2</sub> emissions [4,5]. Road transport vehicles are predominantly using fossil fuels, which emit large quantity of greenhouse and other polluting gases into the atmosphere and therefore significantly contribute to climate change and global warming [6–8]. Without appropriate regulatory measures, energy use and greenhouse gas (GHG) emissions from the land transport sector is

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