

Legal aspects of alternative fuels' use in transport

Abstract

What connects solar energy, palm oil and the construction of the Nord Stream 2 gas pipeline? All these topics have one common denominator, i.e. alternative fuels. This group of fuels, which is represented by electricity, hydrogen or biomethane, has the ambition to replace fossil fuels and reduce the negative environmental effects of the sectors of the economy where fossil fuels are used - in transport and energy. This thesis focuses on the transport sector and pursues two lines. The first part of the text examines, by using the example of biofuels, natural gas and electricity, whether and to what extent alternative fuels fulfill the purpose of the alternative in relation to oil-based fuels. The principle of energy security and the principle of sustainable development in its environmental and economic aspects are used as a benchmark. In the second part, this thesis pays attention to legal instruments that determine the future of alternative fuels. Specifically, emission limits for passenger cars and light-duty vehicles and financial support for alternative fuels at all stages of their life cycle are analyzed. The purpose of this work is to capture the momentum of the ongoing legislative development in the field of alternative fuels, to try to predict where these trends are heading to and to give an objective insight into topic of alternative fuels. Although alternative fuels are considerably supported, especially in concept papers of the EU, it turns out that this one-sided positive view overlooks many of the negative aspects associated with alternative fuels. These are not only shortcomings in terms of energy security, which are not so surprising with regard to the history of natural gas supplies to the EU for example, but also shortcomings in terms of sustainability. The consequences of such uncritical attitude towards alternative fuels can be overwhelming, since the extensive use of alternative fuels is one of the most important tools for combating climate change.

Key words: alternative fuels, energy security, sustainable development