## Mitigation of Climate Change in the Energy Sector from the European Union Law Perspective

## **Abstract**

Climate change is a global problem that can only be prevented through a systematic change in a number of areas of human activity. The key element in climate change mitigation is the measures taken in the energy sector, as the energy sector produces the largest amount of greenhouse gas emissions compared to other economic sectors. Therefore, the EU pays considerable attention to mitigation measures in the energy sector in its climate policy. The 2030 Climate & Energy Framework not only outlines the objective of reducing greenhouse gas emissions, but also prescribes binding targets on increasing the share of renewable energy in the final energy consumption in the EU and on improving energy efficiency. The aim of this master's thesis is to explain the complex climate change mitigation system in the energy sector as regulated by the EU law. The EU climate law stems from international legislation, therefore, this thesis first focuses on the basic instruments of the climate law that were adopted at the international level, and following that, it analyses the European legislation in detail. In this context, the current climate targets resulting from both international regulation and European legislation are described. The functioning of legal instruments under the EU law that contribute to climate change mitigation by reducing greenhouse gas emissions in the energy sector is analysed in more detail, such as the transition to carbon-neutral forms of energy, improving energy efficiency, the economic motivation of polluters to reduce emissions through the EU Emissions trading system and the Effort sharing. Finally, the thesis focuses on the Governance of the Energy Union, which coordinates member states in achieving climate targets. The last chapter discusses whether the Energy Union has sufficiently efficient means to ensure that the member states properly fulfil the climate targets in the areas of renewable energy and energy efficiency.

**Keywords:** mitigation of climate change, energy efficiency, renewable energy, Governance of the Energy Union, 2030 Climate and Energy Framework EU