

## Bachelor or Master Thesis

# Analysis and Modeling of the Political and Legal Framework of the Transportation Sector

### ■ Organizational aspects

The thesis can be written in **English, French, or German.**

### ■ Motivation and objectives

CO<sub>2</sub> neutrality must be achieved by 2050 in order to reach the targets stipulated in the climate protection agreement of Paris. Since the transportation sector is the second most emitting sector in Germany, its emission reductions should drastically decrease in the next 30 years. Therefore, the European Commission, the German, and the French governments intensify their political and legal framework concerning the transportation sector. The aim of this study is to predict the European and national intensifications that will be implemented until 2050 in order to achieve the goals set by the European Commission, the French, and the German governments.

### ■ Content of the thesis

At first, you will review the literature to inventory the political and legal frameworks constraining the transportation sector. For this purpose, you will define the geographical boundaries (France, Germany, or Europe) as well as the transportations systems (Road transport, air transport, etc.) that you will investigate. Afterwards, you will create a database where you will save historical data about the indicated political and legal frameworks. You will then model future political and legal frameworks according to the data that you gathered in the database. During this step, you may use extrapolation methods from the literature that refer to probabilities and uncertainties. Subsequently, you will evaluate your approach using Monte-Carlo simulations and compare them to the climate targets set by the governing institutions. At the end, you will also focus on the critical appraisal of the assumptions that you attributed to the system during the analysis. These aspects will be the basis for the discussion in your thesis.

### ■ Requirements

Reliability, commitment, and pro-active attitude

### ■ Duration

3 to 6 months

### ■ Please contact

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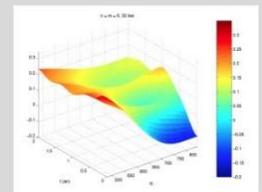
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