

Examination of opportunities on participating in sequential energy markets and identification of possible systematic price differences

1. Business Goal:

In the following, the intended business goal of examining sequential markets is briefly explained in its essential core points:

1.1 An energy trading company represents the client in the case of this investigation.

1.2 This stakeholder wants a study of price fluctuations and deviations in sequential markets in order to exploit arbitrage opportunities. In this way, the profit from energy sales for the company can be optimized or even maximized. Therefore, the client could benefit significantly from the analysis and prediction of price differences, fluctuations and volatilities.

1.3 A permanent implementation of the data analysis required to fulfill the pursued business goal would allow the company to split its available energy in the different markets more effectively. The planned undertaking could also have the side effect that mostly incalculable energy yields, such as the yields through different renewable energies sources, could experience a better integration into the system of the existing energy market. More specifically, these incalculable energy quantities could benefit from strengthening the short-term electricity markets due to a more strategic placement of energy across different markets.

The business goal is related to the problem of the insufficient orientation of energy prices to the respectively current demand. As well it addresses the challenges created by parallel participation in several markets, which has become essential mostly due to renewable energies.

1.4 Identifying a systematic in the price differences of sequential markets and through this deriving a recommendation for pricing auction offers would be considered a success. From that would increase the effectiveness of dealing with the energy market's price volatility and this would ensue a decrease of current opportunity costs.