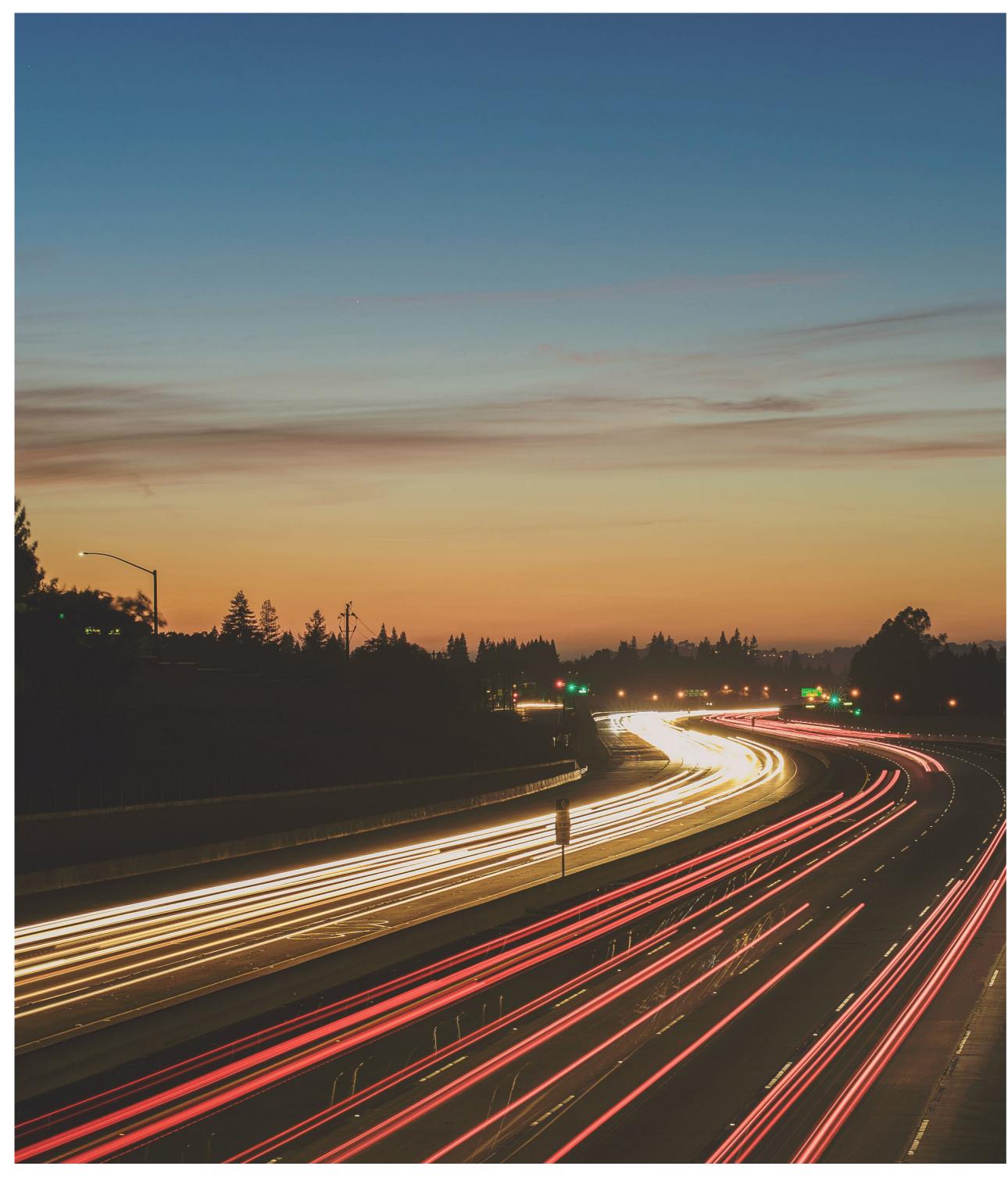
HOCHSCHULE LUZERN

Technik & Architektur
FH Zentralschweiz

Bachelor's thesis in Energy Systems Engineering

Municipality's decarbonisation & sustainable energy provision agenda





Wangen-Brüttisellen

Wangen-Brüttisellen is a dynamically growing municipality in the Glatt valley of Swit-zerland. It consists of around 7,900 inhab-itants.

Wangen includes more farmlands and hilly region, and Brüttisellen includes more inhabitants and flatter region, located exactly in the middle of canton of Zürich. The municipality fulfils daily life's every necessity with its local industry and connects to the larger shopping centres through its well developed public transport network. Wangen-Brüttisellen is well connected to the highways and the national streets.

Strategic measures for a municipality's decarbonisation & sustainable energy provision agenda

Over the years, the municipality of Wangen-Brüttisellen has seen an increase in population, energy consumption and transit traffic. This leads to an increase in the carbon dioxide emissions into the environment of Wangen-Brüttisellen, causing environmental and health impacts.

This thesis calculates the current energy demand and carbon dioxide emissions of the municipality as a baseline and provides strategic measures to their emissions reduction and sustainable energy provision. The strategic measures are aligned with the national objective of 'Swiss Energy Strategy 2050'.

The strategic measures for decarbonisation and sustainable energy provision can be found in the thesis. The detailed results for each category are also provided in the thesis.

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Industrial partner: Municipality of Wangen-Brüttisellen

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