

Zusammenfassung der Master-Thesis
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Effective adaptation to climate change.
Vertical façade greening of Zurich City Hospital Tower:
Investigation into the effects on human health and well-being.

Rising temperatures and intensifying heat stress pose significant health risks for urban populations. To address these threats, Swiss cities must adopt adaptation strategies that enhance both environmental resilience and public health. Nature-based solutions, such as vertical greening systems, offer a promising approach, yet their implementation remains limited and underexplored.

This study examines the façade greening at Zürich's Triemli Hospital, which was introduced as a pilot initiative to explore the benefits of infrastructure greening in urban healthcare settings, assessing its impact on hospital staff, patients, and visitors. Using a mixed-methods approach, it combines survey data collected over three months in the summer of 2024, targeting these groups, with qualitative insights from focus group discussions with hospital employees. This approach provides a broad and detailed understanding of how the intervention was perceived and experienced.

The findings reveal that while many participants knew about the greening project, their understanding of its intended benefits was limited, and their perceptions of its effect were mixed. Many participants found the greenery aesthetically pleasing and beneficial for their well-being, associating it with a sense of calm and connection to nature. However, opinions on its effectiveness in regulating indoor temperature varied, with some expressing scepticism. Additionally, hospital staff reported maintenance challenges, among which unintended ecological effects have developed into a notably unanticipated source of operational strain.

The study highlights the potential of vertical greening systems as a nature-based adaptation strategy for urban healthcare settings. It emphasizes the need for structured planning, stakeholder engagement, and adaptive maintenance strategies to maximize its benefits. These findings reinforce the importance of public health expertise in climate adaptation and the need for user-centred evaluation to assess such interventions. For vertical greening to be successfully integrated into urban infrastructure, it requires evidence-based planning and long-term commitment so that it delivers meaningful benefits for both environmental sustainability and public health.