

## Management Summary

In recent years, the importance of competitiveness has been increasingly recognized. As Michael Porter, in his article "*The Competitive Advantage of Nations*" stresses, by providing a unique combination of characteristics in business locations, countries can foster competitiveness in order to boost productivity and deliver value to advance the public good.

Porter argues that the nature of the business environment locations offer to firms is decisive in this outcome. In World Economic Forum's (WEF) report "*The Competitiveness of Cities*" Espen Barth Eide states that "As leaders look for ways to make their economies more competitive and to achieve higher levels of growth, prosperity and social progress, cities are typically identified as playing a crucial role." In this respect, with a view toward promoting competitiveness, cities are expected use a broad range of measures to effectively tackle urban challenges now and in the future.

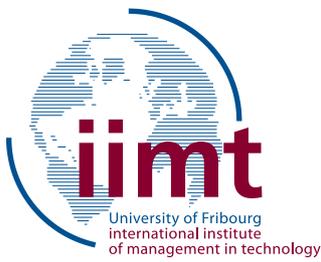
The United Nations' projections show that almost 70% of the world's population will live in urban areas by 2050. Smart Cities will therefore need to find some smarter answers for urban housing growth, and its consequent impact on climate change. In light of that, in Michael Green's speech "*Green Cities*", he emphasizes that wooden high-rise buildings offer an economic effective solution to this problem, due to their minimal environmental footprint, significant carbon sequestration capability and benefits in terms of shorter construction time.

This offers a unique opportunity to the highly skilled Swiss timber industry as skyscrapers made of wood would gain much greater acceptance when compared to those made of competitive materials.

However, although Swiss forest covers 32 % of Switzerland's territory and is considered key for sustainable economy and society, Swiss forestry has not exploited its potential to the full. Due to a lack of local availability, wood used in the Swiss building industry is mostly imported despite the Swiss government's efforts to increase the use of Swiss wood in the building sector.

This offers a unique opportunity to Smart City initiatives to satisfy the need for advanced technology, specialized skills and information to overcome the forest industry's high costs, administration deficits and market isolation. Moreover, with the high standard of Swiss wood construction engineering, Swiss cities have an opportunity to catch up or even bypass top-ranked Smart Cities in the world by competitively differentiating themselves.

In this thesis, the desk research is primarily concerned with an analysis of different studies and Smart City frameworks provided by The iimt, National and International Economy Module - Microeconomics of Competitiveness, with the goal of evaluating whether Swiss Smart Cities and the wood industry can contribute to each other and by doing so, play a part as a source of competitiveness for Switzerland.



Mirrored in economic strategies explored in Philippe Gugler's "*Microeconomics of Competitiveness*" course, the main findings and results of the thesis reveal that Switzerland has the opportunity to increase competitiveness at a microeconomic level, through a three-pronged approach: upgrading the quality of the business environment with Smart Cities initiatives, activating and developing Swiss forest industry and exploiting wood-construction industry strengths.

## Table of Contents

Acknowledgements .....	<b>Erreur ! Signet non défini.</b>
Management Summary .....	<b>Erreur ! Signet non défini.</b>
Table of Contents .....	3
List of Figures .....	<b>Erreur ! Signet non défini.</b>
List of Tables .....	<b>Erreur ! Signet non défini.</b>
Abbreviations.....	<b>Erreur ! Signet non défini.</b>
1. Introduction.....	<b>Erreur ! Signet non défini.</b>
1.1 Problem Statement .....	<b>Erreur ! Signet non défini.</b>
1.2 Research Approach .....	<b>Erreur ! Signet non défini.</b>
1.3 Structure of the Master Project .....	<b>Erreur ! Signet non défini.</b>
2. City Competitiveness, Sustainable Economic Growth and Climate Change	<b>Erreur ! Signet non défini.</b>
2.1 Conceptual Framework of Smart Cities .....	<b>Erreur ! Signet non défini.</b>
2.2 Contribution of Buildings to Green Growth.....	<b>Erreur ! Signet non défini.</b>
2.3 Benefits of Integrating Wood into Climate Action.....	<b>Erreur ! Signet non défini.</b>
3. Swiss Wood Industry Environment Conditions and Competitive Materials	<b>Erreur ! Signet non défini.</b>
3.1 Swiss Government Upgrading the Quality of the Wood Industry Environment	<b>Erreur ! Signet non défini.</b>
3.2 Swiss Wood Industry Overview and Major Market Players	<b>Erreur ! Signet non défini.</b>
3.3 Wood Products Compared to Alternative Construction Products	<b>Erreur ! Signet non défini.</b>



4. Synergistic Relationship between Smart Cities Initiatives and the Wood Industry **Erreur ! Signet non défini.**

4.1 Swiss Smart City Initiatives Profiting from the Swiss Wood Industry **Erreur ! Signet non défini.**

4.2 Swiss Wood Industry Profiting from Swiss Smart Cities **Erreur ! Signet non défini.**

4.3 Switzerland Profiting from Wooden Smart Cities ..... **Erreur ! Signet non défini.**

5. Conclusion ..... **Erreur ! Signet non défini.**

Bibliography ..... **Erreur ! Signet non défini.**