Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences



Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners (<u>Examencommissie-</u><u>BK@tudelft.nl</u>), Mentors and Delegate of the Board of Examiners one week before P2 at the latest.

The graduation plan consists of at least the following data/segments:

Personal information	
Name	Marta Pietraszewska
Student number	5861810

Studio		
Name / Theme	Theme 8 – User perspective	
Main mentor	Herman vande Putte	MBE: Real Estate Management
Second mentor	Michael Peeters	MBE: Real Estate Management
Argumentation of choice of the studio	Interest in corporate real estate management.	

Graduation project	Graduation project			
Title of the graduation project	Corporate Real Estate Strategy of a Manufacturing Company in Light of Changing Sustainability Reporting Regulations			
Goal				
Location:		n.a.		
The posed problem,		Real estate should be a crucial topic in discussions about climate change, but it is often overlooked. This is particularly true for companies whose primary business is not real estate, such as manufacturing companies, where real estate serves as a supporting element. The EU has introduced policies to address sustainability issues, and companies now face the challenging task of responding to sustainability reporting requirements, which also include real estate. The method for reporting and the specific data to be collected are not yet clear. This research will analyse the corporate real estate strategy of a manufacturing company Wacker Neuson.		
research questions and		 Main research question: What is the impact of the ongoing European Union's sustainability regulations on the sustainability strategy of a corporate real estate department in the manufacturing industry and what is the use of digital twin technologies in the strategies ? Research sub-questions: What are the ongoing European Union's regulations on sustainability reporting? 		

	 How are those ongoing regulation on sustainability relevant for corporate real estate?
	 What are the current sustainability strategies implemented at a manufacturing company in regard to real estate sustainability?
	4. What should be adapted within the mentioned strategies according to the ongoing regulations?
	5. What is the use of the digital twin technology in the sustainability strategies?
design assignment in which these result.	n.a.
Process	

Method description

The following research is an exploratory research and will be done through a case study of a manufacturing company that owns a real estate portfolio. The research methods include gathering data through document analysis, site visits and interviews. The method is divided into three parts: document gather on sustainability and reporting from the European Commission, document gather from the company on their portfolio and data collection possibilities and data gather based on interviews with company employees and visits of production sites. The following step is the analysis of the gathered data. The analysis is also divided into three parts: early data analysis, exploration and description and finally explanation and prediction. Lastly, conclusions will be drawn and possible solutions to approach sustainability reporting will be proposed.

Literature and general practical references

For this research I have done an extended literature research on the following topics: corporate real estate in manufacturing industry, sustainability in corporate real estate, sustainability reporting, EU regulations on sustainability and corporate real estate strategies. I will continue the literature research after P2, especially documents on sustainability reporting published by the EU. As part of my market research I have interviewed 4 practitioners mostly related to sustainability and sustainability reporting. In the research part I will conduct a case study in an organization: a manufacturing company that owns a real estate portfolio.

Reflection

1. What is the relation between your graduation (project) topic, the studio topic (if applicable), your master track (A,U,BT,LA,MBE), and your master programme (MSc AUBS)?

My graduation thesis is related to a course Real Estate Management that is part of my master track Management in the Built Environment.

2. What is the relevance of your graduation work in the larger social, professional and scientific framework.

My graduation thesis is relevant because of the emphasis on sustainability and sustainability reporting regulations, which are ongoing topics within the European Union. Additionally, the sustainability of real estate portfolios of manufacturing companies is not often mentioned in research literature.