Anexo I. Registro del Título del Trabajo Fin de Grado (TFG)

Program: E4 Group: B Fecha: 10/23

Assigned Director: Lucía Barcos Redin

Proposed Title: Sustainability in chemical logistics: a comparison of environmental practices between European and U.S. companies

By: Thomas Austin

Sustainability in chemical logistics: a comparison of environmental practices between European and U.S. companies.

Justification For Study

Sustainability is an important issue in general, and over the past few years, it has been a high-priority agenda for nations aiming to modernize and advance their sustainability efforts. However, the chemical logistics industry in particular is tasked with the transport, storage, of materials that have negative effects on human life and the environment if not managed responsibly. Unsustainable practices, such as inefficient treatment of wastes or lack of preventive safety measures, can lead to severe damage to the ecosystem and even affect the social and economic stability of the involved areas. Therefore it is important to explore the idea of sustainability in the chemical logistics sector to compare practices between Europe and the United States to understand differences and potential ways for both to improve sustainability practices.

Economically and commercially, chemical logistics sustainability is today a strategic necessity rather than an afterthought. The increasing global focus on climate change, increasingly strict environmental legislation, and customers' demands for greener supply chains are forcing businesses to rethink how they operate. Firms that can incorporate sustainability into their logistics function can expect to gain competitive advantage through improved operational efficiency, energy and waste reduction expenses, and an improved corporate reputation. In addition, sustainable logistics also drive innovation by cleaner technology, utilizing renewable energy, and advanced monitoring systems that provide improved safety and visibility. As markets ever more turn green, companies that are sustainability leaders are also increasing their chances of entering international markets, attracting investment, and developing stronger and more resilient business models.

Since this topic connects multiple different fields like logistics management, environmental sustainability,and responsibility, this topic is a good choice and has sufficient corporate rent resources for a TFG. Understanding sustainability in chemical logistics will help us better understand how technology, laws, and business practices work together to create safer and more responsible supply chains. It also lets us compare the US and Europe, which have different environmental laws and cultural attitudes toward sustainability.

Objectives & Goals Of The Work

My objective in research is to present a comprehensive view of sustainability practices in chemical logistics companies. At a general level, my aim is to examine current practices and how they relate to sustainability, then examine the procedures that are being implemented and explore possibilities for future practices. Furthermore, I will compare the regulatory context between the United States and Europe to examine their differences and the implications of these regulations on businesses within the industry. To do this, I will initially look for the most pressing issues of sustainability that impact the chemical logistics sector before comparing different environmental standards and structures in the two regions. I will then examine the sustainability and/or ESG reports of three firms in each region to evaluate current sustainability efforts and highlight the importance of future advancement. Finally, I will do a comparative study of the difference between noted discrepancies of companies within the United States and those within the European Union.

Methodology

To support my research and findings, I will obtain information from academic sources such as SCOPUS, Web of Science (WOS), and Google Scholar. In addition, I will use industry data, including reports and statistics, to further substantiate my findings. By using these sources, the goal is to provide a comprehensive comparative analysis between the USA and Europe that may include differences in transport and safety policies, as well as circular economy practices. To explore this topic in greater depth, I also plan to conduct several interviews with professionals in the field to gather contrasting perspectives and gain additional insights**.**

Index (Provisional)

Introduction and objectives

- Justification of the topic: relevance of sustainability in the chemical supply chain.

  Objective: to compare sustainable strategies between American and European companies in the logistics/chemical sector.

Theoretical framework

- Concept of sustainability in the supply chain.
- Relevant aspects of sustainability in the chemical logistics sector
- Exploring applicable institutional theory, and Green Supply Chain Management

Legislative framework:

- Main standards and frameworks: GRI, ISO 14001, SDGs, etc.
- Selection of companies and study of their sustainability practices
- Selection of companies: why they were chosen and description of them
- Individual analysis of each of the six selected companies through their sustainability/ESG report.
- Qualitative description of identified good practices

Comparative analysis

- Comparison between the six companies, with special emphasis on the US-Europe comparison
- Include a table of key differences between USA, and Europe

Summary table of key indicators

- Conclusions and recommendations
- Common lessons and good practices
- Challenges and opportunities for the future

Bibliography

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