## **Capstone Project Baltic Xpress Public Summary**

A US-based corporation specializing in providing niche solutions to the energy and infrastructure markets in Central Europe is focused on developing renewable energy infrastructure and providing alternative fuel supply and distribution to Central Europe.

The Russian-Ukrainian conflict served as a catalyst for company's commitment to energy solutions. Prior to the conflict, the company had initiated plans to develop photovoltaic assets in Central Europe. However, the crisis disrupted this strategy, prompting them to recognize the urgent need for stable energy supply in Ukraine. Consequently, the company began efforts to supply conventional energy to markets in crisis.

As a consultant for the company, my task involves creating a tailor-made intermodal delivery solution with intermodal transportation as its backbone for door-to-door delivery. This approach would enable the company to efficiently serve the Ukrainian market with increased volume, reduced costs, and consistent supply.

In line with the Capstone Project assignment, the company outlined a plan that evolves into a comprehensive Railway versus Trucks versus Intermodal analysis for Capstone Project Baltic XPress. The primary objective of this assignment is to develop a viable transportation strategy that can be presented to co-investors for funding a more comprehensive transportation solution.

The project's initial step involves transferring the fuel from ships to shore tanks for storage. Throughout the project, various costs will arise from different scenarios, including tolling costs for storage and loading at various terminals, expenses associated with third-party cisterns, and the cost of booking a full train for cistern transportation. When transporting fuel directly to Ukraine using ISO Tanks, customs clearance costs and loading expenses need to be accounted for and that includes unloading fees, fuel storage costs in duty-free shore tanks, loading ISO tanks, customs clearance, and lifting ISO tanks onto trucks for transport to different terminals.

In Ukraine, the team will unload fuel from the ISO tanks to either railway cisterns or trucks, which will complete the final leg of the journey to the customers. By implementing an intermodal transportation strategy and carefully analyzing the costs and logistics involved, the company aims to optimize the fuel delivery process, ensure reliability, and attract potential co-investors for the comprehensive transportation strategy. The project aims to increase fuel shipments from 1,000 metric tons a month to 5,000 metric tons a month within a 12-month period by optimizing intermodal transportation solutions.

The project involves an in-depth analysis of these steps and factors to determine the overall complexity and cost of the intermodal fuel delivery process. The findings are presented in a pitch deck, comprehensive report and also in a pricing model, which will provide insights into both rail and truck transportation solutions.

Financial aspects of the project are thoroughly assessed, taking into account variables such as fuel quotation, duration per trip, total distance, cost per kilometer, cost per tank, and round-trip cost per metric ton. Additional considerations include the premium for the company and the selling price of fuel at the border.

While the project generates a positive net income, it becomes apparent that setting a higher selling price with a premium would not be a viable option in a volatile market with lower average market prices.

Overall, the project provides a comprehensive understanding of the cost assumptions involved in the pricing model creation for the transportation project. It highlights the efforts made to obtain necessary information, analyze potential wastage, and assess the financial aspects of the project, ultimately leading to informed decision-making for successful project execution.

After conducting a comprehensive review of the project, conclusions were reached, and recommendations issued for the company in their current situation. The recommendations were the most viable options after evaluating multiple choices and analyzing various aspects of each scenario, in the detailed report.

Based on careful consideration, I choose to advise that the project should be abandoned or at the very least the origination point of the project should be changed based on cost estimates. The following reasons support this recommendation:

Delivering on a small scale is inefficient due to pricing for various services. It is advisable to consider delivering larger volumes on a monthly basis when transporting fuel from the origination point. This approach allows for better contract conditions with carriers and other involved parties, endorsing long-term commitment and price stability. The sharp fall in crude oil prices has significantly impacted the market. Concerns about a weakening global economy, recession fears, and oversupply of oil have contributed to this change. Monitoring global economic conditions and oil supply trends is crucial for assessing the project's profitability. The current demand and market situation differ greatly from when the project was initiated in February 2022.

The profitability of different delivery models and their selling prices is another important consideration. While a premium in price is essential for profitability, offering higher selling prices in a volatile market with lower average prices poses challenges. The profit margin appears relatively low compared to total expenses. Additionally, the pricing of company's products is similar to options from established competitors in Ukraine and Romania, raising the question of why clients would switch from established connections to a newcomer in the market.

In conclusion, it was recommended to the company to carefully assess various conditions and monitor crude oil prices and market trends before making further decisions. If the project is to be continued, it is recommended to evaluate alternative business or delivery models and conduct a comprehensive analysis of pricing and profitability.

During the extensive process of the project, various unpredictable changes in plans occurred. While making things complicated, this was very necessary to understand how it is to fill the shoes of an entrepreneur on a daily basis. Working with the top industry specialists and them sharing their expertise, experience and attention gave me a lot of motivation to contribute to the project from the best of my abilities. The continuity of passing on skills was greatly appreciated and will be used in future endeavors.