

2021 Final Year Project Definition Form

Project Title:

Sustainable Warehouse Design

Company details:

DSV Global Transport and Logistics: <https://www.dsv.com/>

DSV Global Transport and Logistics South Africa: <https://www.za.dsv.com/>

DSV Global Transport and Logistics South Africa - Solutions Offices ([DSV Office park \(Plumbago\)](#)), however remote meetings are encouraged during COVID epidemic).

Company background:

DSV Global Transport and Logistics is in the Top 5 companies globally providing 3rd Party logistics services. DSV has more than 40 000 employees across 80 countries with their head office being located in Denmark. Locally in South Africa DSV have more than 4000 employees and 30 engineers working for across 5 different divisions.

Project description:

DSV Panalpina committed to a Science Based Targets (SBT) Initiative in 2020 ([Press Release](#)). A number of initiatives have been identified in Solutions to specifically reduce Scope 1 & 2 emissions in warehouses. In addition DSV has a global strategy to consolidate facilities in key locations. One of the areas that requires more in-depth specific research, analysis and recommendation is in the design of a warehouse to be more sustainable (and have the lowest possible carbon footprint). This can involve better utilization of natural light, use of LED and solar power generation, layout optimization, etc. The aim of the project will be to create a blue print for future designs that can be used in Group Property to ensure that every new facility built in DSV helps reduce the overall Carbon Footprint of the company.

The project scope will entail:

- Literature review of sustainable design elements.
- Review of current practices and considerations in DSV
- Practices in other industries and recommendations for application in mega warehouses
- Development of Carbon Footprint model and impact of different elements on model
- Model that can be used to evaluate current projects and estimate future savings

The end result of the project is to propose a blue print for future developments to help DSV achieve the SBT targets.

Industry mentorship:**Industry mentor contact details:**

Stanley Macmillan
(Director: BCM & DSV
Sigma)

stanley.macmillan@za.dsv.com

0829406073

Project topic application process:

All applicants are to email to stanley.macmillan@za.dsv.com by close of business day 19th of February 2021: a short CV, their academic transcripts as well as a cover letter indicating why they would be a good candidate for the particular project.

Applicants will be notified about project allocations on the 24th of February 2021.

Any other relevant information:

The Student must address confidential information and ensure that deliverables do not contain any confidential, sensitive or proprietary information of the company. The following is potential actions must be applied:

- o Making use of a fictitious name to represent the company, for example, referring to Company ABC.
- o Withholding, excluding or adjusting important confidential or sensitive data, such as design drawings or financial information.
- o Coding sensitive data, for example, by adding or subtracting a constant from all values.
- o Requesting the Department not to publish the deliverables on UPSpace.