Master Thesis at Volvo Group Purchasing –
Supplier Quality & Development

Please note:
- This assignment is a student thesis. In order for your application to be considered you should currently be a university student eligible to complete a Master thesis as part of your university program.
- Students can apply by themselves or in an already formed group.
- Below presented topics are to be defined based on existing information and suggestions by all involved parties.

About us:
General GTP text will be added by the recruitment team!

Department: Supplier Quality & Development

Topic:
Investigate the CO2 waste for a supplier caused non-conformity.

Description of thesis work
The master thesis will be performed in close collaboration with Supplier Quality-In Plant Engineers (SQP), Production Engineers, Quality technicians and logistic developers.

Create a foundation for a model to get CO2 equivalents for each category of production technology.
- Categorize different products in different groups based on material type, part weight etc.
- Find CO2 losses in Volvo production site based on the supplier Non-conformity
- Investigate the CO2 impact in between different deposition codes.
  - If returned
  - If scrapped
  - If adjusted
- If replacement component is urgent, evaluate what transport method we use and their impact.

Expected output:
A visual way to show the CO2 impact for each Inspection report that is issued by the SQP located in the Powertrain production site in Skövde. This model can be used in support to the SQP to pick the most suitable disposition code for each claim. This model can also support in the decision of how urgent a rush transport is needed to replace the non-conformity parts.

An awareness training kit for internal stakeholders and suppliers to the Volvo group.

Suitable background
We believe you have a background in the fields of supply chain, purchasing and preferably doing your Master degree in Quality, Operations Management, Management of Economics and Innovation or Industrial Ecology.
The ideal student will have knowledge within sustainability and industrial ecology, shows a high level of initiative, is self-driven, has good analytical capabilities and preferably has an interest in the automotive industry.

Knowledge within the material field is not mandatory but will be considered as an advantage.

**Thesis Level**

Master thesis

**Number of students**

2 students.

Whether two topics will be merged into one thesis, or carried out separately with close collaboration, between students will be decided prior to commencement by all the parties involved.

The thesis can start January 2022 and with expected completion in end of June 2022.

**Language**

English or Swedish

**Tutor:**

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