

# Framework for carbon footprint analysis of Scope 3 emissions

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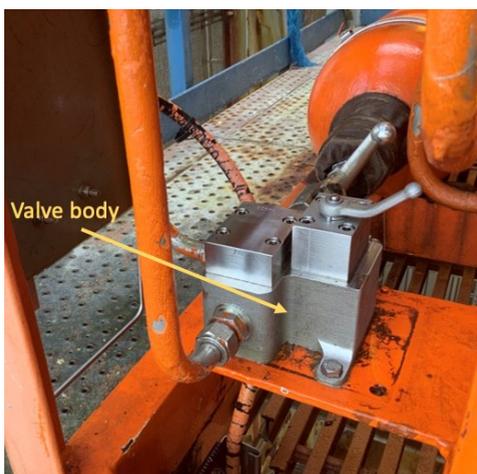
## **Introduction and background:**

To accelerate actions towards the goal of the Paris Agreement, new greenhouse gas (GHG) emission targets have been proposed. As a result, new legislations has been formulated forcing the industry to reconsider investment plans, reconfigure supply chains and reporting on the environmental impacts of their products and activities.

As part of their Scope 3 emission management strategy, Equinor is addressing their supply chain GHG emissions. Among the strategies, Equinor is adopting innovative manufacturing technologies such as additive manufacturing (3D printing) as it has shown the potential to reconfigure supply chains and to improve the environmental performance of products.

## **Problem description and objective:**

The main challenge of quantifying the GHG emissions of products is the acquisition of emission data from suppliers. This project aimed to propose a framework intended to facilitate the calculation of the GHG emission profile of category 1 (purchased goods and services) and category 2 (capital goods) of Scope 3 emissions. The framework suggested was applied in a case study in which the GHG emission profile of an additively and conventionally manufactured valve body are compared.



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