



Energy and emission mapping

How are GHG Emissions and Energy Consumption distributed throughout your transport system

Purpose

In a world where the cost of fuel and subsequent carbon emission is increasing at an increasing pace, having full control of the factors affecting your organization's GHG Emission and Energy Consumption (GEEC) is paramount.

Benefits

A GEEC mapping of your transport system helps you identify potential areas for improvement. Studies show that even a small amount of resources directed at this area may trigger significant reductions in the overall GEEC and the associated cost. The benefits from executing a GEEC mapping of the organization may for instance be:

- Gain valuable insight in to what affects the fuel consumption in your transport system
- Total energy consumption overview by category, operation, product and more
- Overview of GHG emission from top level and down
- Valuable aid in cutting the cost of operation and making the transport system more sustainable at the same time

Our approach

The reason for using GEEC instead of a pure carbon emission mapping is that GEEC will identify and visualize the energy cost drivers. This will explain in plain text the relationship between Carbon emission and energy consumption, and at the same time enable a rebalancing of your transport system: replace transport legs having a high emission footprint with alternative, low-emission transport, and cut the overall cost at the same time.

DNV have extensive experience with offering energy and climate services across industries. This, together with our highly skilled people, our unique knowledge of the maritime sector and state-of-the-art maritime logistics expertise, ensures results of the highest quality.

By applying the GEEC methodology, which is a result of research and development together with industry partners, we will provide your organization with a valuable tool to provide insight into the actual problem areas.



MANAGING RISK

GEEC assessment of transport systems

By combining traditional carbon and energy accounting with logistics know-how, DNV will give your business a valuable overview that is configured to your operational needs, as well as going beyond the border of your organization to assess the emission and consumption from entire transport chains. This enables you to compare different parts of your transport operation to identify where improvement potential (be it internal or external) are found.

Cost of fuel

When creating a map of GHG emission and energy consumption (GEEC map), the type and amount of fuel is a vital part of the picture. DNV combines your organization's operational data with expertise on maritime operational patterns to create a multi-dimensional map on how fuel cost is distributed throughout the transport chain (sea, land, pipe and air). Cost will be presented from an aggregated level down to the cost of shipping a single item from point to point with a specific cargo carrier.

Contract Cost Review (CCR)

In maritime transport chains (and beyond) there is a large amount of contracts regulating the system. These contracts might affect your GEEC in unknown or unforeseen ways. We can help you identify crucial contractual clauses and subsequently quantify the effect of these in the terms of energy and carbon emission cost. By running a CCR on existing contracts, or when implementing new clauses you will achieve a better control of related contractual cost elements.

Assistance in data collection & selection

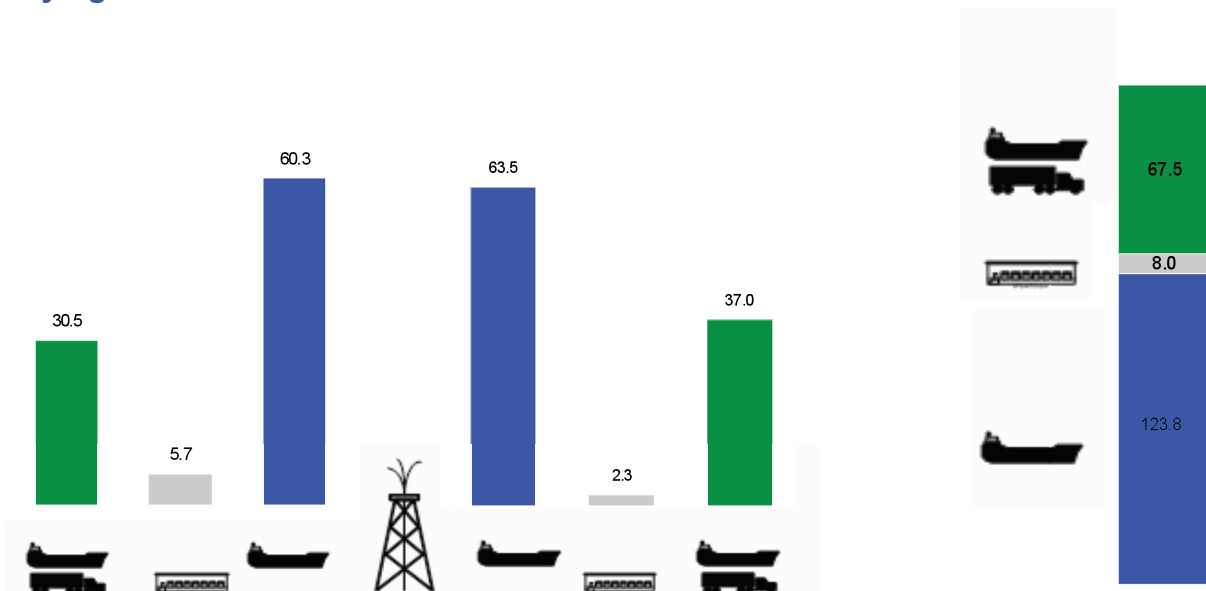
An essential factor when assessing transport system GEEC is high quality operational data. Executing calculations and assessments based on inaccurate or generalised data can at best lead to inaccurate results, and at worst shift focus away from important processes.

We can help your organization choose the right type of factors and assist in collection of data from the operation. The importance of quality data must not be underestimated!

Carbon Inventory

DNV can assist your business in implementing a carbon inventory which is up to date with all current regulations and standards. By implementing a carbon inventory your organization demonstrates a sincere commitment to becoming a more sustainable company in line with consumer demand and current and future regulations.

Identifying crucial areas



By mapping and controlling the GHG emissions and energy consumption from a major player in the offshore supply market we were able to find the hotspots driving up the total GEEC. Subsequently a number of improvement measures were suggested taking into consideration operational, contractual and organizational factors