

Fuel Cost Calculator

Frequently Asked Questions

Q: Can I see the underlying assumption for the fuel costs?

A: Yes, you can see all underlying assumptions and calculations of fuel costs in the Excel version of the fuel cost calculator following this link.

Q: How are the assumptions collected?

A: The assumptions are based on a combination of industry data, public literature and expert knowledge consolidated into an aggregated and anonymized set of assumptions supported by the Mærsk Mc-Kinney Møller Center for Zero Carbon Shipping.

Q: Can I see the explanation for how the assumptions were defined?

A: The Excel version of the fuel cost calculator outlines the underlying assumptions and calculations for fuel costs. You can access it by following this link. Detailed qualifying documentation is currently in development and will be made available.

Q: Is methane slip included for liquefied natural gas and other methane fuels?

A: Yes, a reference methane slip is included for the calculations reduced from ~2% today to 1% from 2030 and onwards.

Q: Do you consider blue fuels (made from a fossil source with carbon capture and storage) in your tool?

A: Yes, one of the options to select is blue ammonia.

Q: Are you modelling the price of the fuels or the production costs?

A: We are modelling the production cost and the availability of fuels.

Q: Is storage, transport, bunkering and logistics cost in general included in the fuel production costs?

A: No, for now, it is the pure production cost, and no logistics costs are considered.

Q: Another key element of selecting a fuel is the availability of it. How do you address fuel availability in the tool?

A: The fuel availability assumptions are a key assumption when testing decarbonization scenarios in our integrated assessment model, NavigaTE. However, for now, the Fuel Cost Calculator (FCC) does not support illustrating fuel availability assumptions. The key elements expected to constrain the fuel availability in the future is the availability of point source captured biogenic carbon to be used when producing electrofuels with carbon (e-methane, e-methanol, and e-diesel) as well as the sustainable biomass required to produce sustainable biofuels.

Q: How do you model electricity costs?

A: We model the electricity as a stand-alone production of renewable electricity with no grid connection. We consider the levelized cost of electricity based on the region and include two different scenarios. The low case is the lower quartile per region and the high case is the median per region.

Q: How do you account for economies of scale?

A: We assume large scale state-of-the-art plant sizes scaling significantly. To see the underlying assumptions, please access the Excel version of the fuel cost calculator following this link.

Access the Fuel Cost Calculator excel file [here](#).

