

## PRESS RELEASE



# Insight in emission and efficiency with the IVR Emission Calculation Tool

Rotterdam, 22 September 2023

## The IVR Emission Calculation Tool is now live

Inland navigation is already the greenest and most efficient mode of freight transport. In view of the energy transition, inland navigation will become even

greener, with the goal of being nearly emission-free by 2050. Until then, further greening is needed to reduce the amount of emissions as much as possible. To gain insight, IVR has developed the Emission Calculation Tool. The Emission Calculation Tool gives an indication of the current emissions of an inland vessel's propulsion installation and therefore also provides insight into the efficiency of a vessel. The tool was already launched in March 2023 for Dutch ship owners, but is now also available in English.

## The calculation

Emissions are calculated per kilowatt-hour (kWh) and per ton-kilometre (tkm). Emissions per kWh are in line with requirements when issuing emission labels and for designating emission standards (e.g. Stage-V). Emissions per tkm give a more accurate picture, because it takes into account e.g. distance and the cargo transported. The tool calculates the most relevant propulsion engine emissions within current and future laws and regulations: carbon dioxide  $(CO_2)$ , nitrogen  $(NO_x)$  and particulate matter (PM). A number of indicators are used to make the calculation, including engine year of construction, ship and engine type, deadweight tonnage, SCR catalyst, particulate filter, power and waterway type.

#### Well-to-Tank vs. Tank-to-Wake

Total emissions are split into Well-to-Tank (WTT) emissions and Tank-to-Wake (TTW) emissions. WTT emissions occur during the production and transportation of the fuel to the vessel, and TTW emissions occur when the fuel is used on board the vessel.

## Access to the Emission Calculation Tool

The Emission Calculation Tool is integrated in the <u>IVR Ships Information System</u>. Ship owners always have free access to their own (vessel) data and can therefore also use the Emission Calculation Tool free of charge. For access, they can <u>contact</u> the IVR secretariat or go to <u>the IVR website</u>.

### **Accuracy**

In general, the more reliable the data entered, the more reliable outcomes are. Ship owners can add or modify their vessel's data themselves via the database. To know a vessel's actual emissions, measuring equipment needs to be installed. Moreover, to calculate emissions per tonne-kilometre, the distance travelled and the cargo carried should be tracked. Installing measuring equipment and getting all the information on distances and cargo takes a lot of time, effort and funds. The Emission Calculation Tool therefore tries to estimate emissions based on data that is readily available or can be estimated. Some of the vessel's data is retrieved directly from the database. Other fields in the calculation tool still need to be filled in.

## Sustainable investments

IVR hopes to increase insight with the development of this tool. For example, it is possible for users of the tool to get a picture – prior to sustainable investments – of the impact of this investment on emissions. For example, what will be the impact if a Stage-V engine, particulate filter or SCR catalyst is installed, or if they sail with another, more sustainable fuel (such as HVO)?













For questions about the IVR Emission Calculation Tool, please contact the IVR secretariat at <a href="mailto:info@ivr-eu.com">info@ivr-eu.com</a> or phone +31(0)10 - 411 60 70.

IVR, International Association for the representation of the mutual interests of the inland shipping and the insurance and for keeping the register of inland vessels in Europe.

## Note to editors:

Frouwke Klootwijk-de Vries Secretary General: +31(0)10 411 60 70 Sonja Kuipers Marketing, Communication & PR: +31(0)10 411 60 70









