



## ADDITION OF BIOFUEL

### WHICH DIRECTIVES?

In the context of greening in inland navigation, two directives (amongst others) have currently been drawn up, namely:

- ▶ **Fuel Quality Directive (FQD) 2009/30/EC**
- ▶ **Renewable Energy Directive (RED II)**

The aim of these directives is to reduce the main polluting emissions during the production and use of fuels, making greater use of renewable sources such as biofuels, renewable electricity or hydrogen.



## Fuel Quality Directive (FQD)

# 6%

### Fuel Quality Directive (FQD) 2009/30/EC

In principle, inland fuel suppliers should have complied with the Fuel Quality Directive (FQD) from 01.01.2022. This means that suppliers must reduce the CO<sub>2</sub> footprint in the fuel chain by 6%. Fuel suppliers must add at least 6% biofuel to their diesel, or compensate for this by purchasing Renewable energy units (HBES). Mid-December 2021 it was decided by the Dutch government to postpone the reduction obligation to **01.01.2023**.

## Renewable Energy Directive (RED II)

### Renewable Energy Directive (RED II)

The RED II directive requires an admixture of 16.4%, which will increase annually. Issues seem to arise with the quality of bio-additives and there is uncertainty about the potential risks. It was therefore decided, after discussions with the sector (including IVR) and the Bishop/Alkaya motion, to carry out an additional research into the risks and possible solutions. This research has been carried out by NEN. As this research has not yet been completed it has therefore been decided to postpone the implementation of the RED II directive for the time being.

# 16,4%



### ADVICE IVR

In view of the lack of clarity about the consequences of bio-admixture, IVR has advised to only add biofuel when the open questions have been clearly answered and measures to prevent problems can be taken as much as possible. Whatever the outcome; cost increases will be inevitable, since greening is not free of charge.



## ATTENTION REQUIRED

It is possible that at this time blending of biofuel will take place. From the recent past, the experience is that when bunkering one can receive gas oil with a percentage of biofuel, without being informed by the supplier. Attention is therefore required when bunkering your fuel. Make sure you get what you ask for and that it is of the right quality. It is expected that biofuel, once the risks have been properly identified, will be extensively applied in the inland navigation sector.



## HOW TO AVOID PROBLEMS?

In order to prevent problems when using fuel (whether or not mixed with bio-additives), a number of steps must be followed.

Below are our recommendations to prevent potential problems when using (blended) biofuel.

- ▶ Consult with your fuel supplier whether, and if so what type of biofuel (blending) will be supplied, with which quality criteria, ask for the specifications and take (if possible) **representative samples** during each bunkering.
- ▶ Before adding biofuel, **contact your engine manufacturer** to determine if and if so what modifications to your engine(s), fuel and filtration system are needed. Also consider whether adjustment of maintenance intervals of the engine, filters and aftertreatment installation are necessary when switching to biofuel and whether the biofuel fits within the type approval of the engine. These modifications can differ per manufacturer and type of engine and therefore timely consultation with the supplier of the engine is necessary and desirable.
- ▶ Consult with the engine manufacturer and your lubricating oil supplier about the **lubricating oil** to be used when using biofuel and whether, and if so what measures should be taken with regard to the aftertreatment system.
- ▶ In connection with the hygroscopic and cleaning effect of biodiesel components in the fuel, **clean the fuel tanks and the fuel line system** immediately before use to prevent sludge and bacteria formation, clogging of filters and pumps and any damage to the fuel system.
- ▶ **Drain water in the tanks regularly** and check and clean the tanks regularly.
- ▶ Do not change type/quality fuel and bunker as much as possible with **the same supplier**. If you need to bunker through another supplier, make sure you get the right type of fuel and the desired quality. Of course, take representative samples during bunkering.
- ▶ Check the **fuel line seals** regularly for any leakage due to possible deterioration.
- ▶ Run frequent checks of the **fuel filter contamination level** and change filters frequently in accordance with the manufacturer's instructions and use the appropriate fuel-matched filters.
- ▶ Perform **maintenance** on engine and aftertreatment plant in accordance with manufacturer's instructions.



IVR is and will continue to be closely involved in developments in the field of biofuels, but also in the field of other alternative fuels and propulsion systems. IVR will now and in the future, act as an independent association and seeks to inform the market in detail about these developments, the possible consequences and the measures to be taken to prevent any potential damage. If you have any questions regarding the developments, you can always contact the IVR secretariat.

## DISCLAIMER

The contents of this leaflet have been compiled with the utmost care. However, IVR cannot guarantee the accuracy or completeness of the content. Given the many current (political) discussions on the subject of biofuel, it may be that the content at the moment of reading can be outdated. IVR tries to update the leaflet as much as possible. IVR does not accept any liability that may arise from the contents of this leaflet. © IVR Technical Leaflet- Addition of biofuel. December 2021