Policy for the Decarbonisation of the UK Inland Waterways Leisure Fleet

Vision: IWA's Vision is that, recognising the government's commitment to a zero carbon future for the UK, the UK Inland Waterways Leisure Fleet should be decarbonised as quickly as possible and to the largest practical extent such that boaters and others can continue to enjoy the unique nature of our navigable canals and rivers with minimum loss of their historic character.

This policy statement sets out IWA's views on the Decarbonisation of the UK Inland Waterways Leisure Fleet in as much as it relates to the propulsion of leisure craft.

This policy was originally developed by the IWA's Sustainable Boating Group, based on some five years of work and research involving a variety of like-minded organisations.

Version control:
Original policy published: 4th September 2025
Previous version updated: 27th March 2026
This version:
Final Edit: 29th March 2026
Approved by Sustainability and Environment Committee 16th March 2026
Approved by Trustees at Board meeting: 11th April 2026

Key Policy Statements

Our Key Policy Statements on for the Decarbonisation of the UK Inland Waterways Leisure Fleet are listed below. These Key Statements can also be found in the main body of this document with more detail.

IWA believes that the UK Government should develop the following policies in order to significantly and rapidly decarbonise the Inland Waterways Leisure Fleet:

a. **All new UK-based leisure vessels designed for inland waterways to be zero-emission capable, recognising that the current state of technology and infrastructure probably means that they will be capable of electric propulsion but require a back-up generator, probably diesel driven, to provide electrical power when other sources are insufficient or unavailable.**

b. **Sufficient recharging points to be available on the inland waterways to reduce or eliminate the need for electric craft to use their diesel generators or engines.**

c. **Ensure that Hydrotreated Vegetable Oil (HVO) is available to inland waterways boaters at an acceptable price in order to power the existing fleet and the back-up generators on electric craft as an interim fuel.**

1 Introduction

The UK Inland Waterways, comprising mainly interconnected canals and rivers, is a valuable national resource used by boaters, fishermen, walkers, cyclists, canoeists, paddleboarders and others. It also provides a very significant economic benefit to the country and supports many jobs. The IWA was founded in 1946 with the objective of preventing the closure of the UK canal system, in which it has been outstandingly successful.

It is estimated that there are some 80,000 powered boats on the Inland Waterways, overwhelmingly powered by diesel engines. The nature of these craft is such that they will remain in service for a considerable time, typically 30-40 years, or longer and most are unlikely to be converted to electric drive.

Whilst the fuel usage of these craft is very small in the national picture the IWA believes that the UK inland waterways leisure fleet should be decarbonised as quickly and completely as is reasonably possible.

Accurate figures for fuel usage are notoriously difficult to obtain but estimates vary between 20,000 tonnes per annum and 80,000 tonnes per annum or 0.1% and 0.4% of UK diesel usage, based on the UK Government figures for total diesel fuel usage of 20.4 million metric tons in 2023.

IWA believes that the UK Government should develop the following policies in order to significantly and rapidly decarbonise the Inland Waterways Leisure Fleet:

a. **All new UK-based leisure vessels designed for inland waterways to be zero-emission capable, recognising that the current state of technology and infrastructure probably means that they will be capable of electric propulsion but require a back-up generator, probably diesel driven, to provide electrical power when other sources are insufficient or unavailable.**

b. **Sufficient recharging points to be available on the inland waterways to reduce or eliminate the need for electric craft to use their diesel generators or engines.**

c. **Ensure that Hydrotreated Vegetable Oil (HVO) is available to inland waterways boaters at an acceptable price in order to power the existing fleet and the back-up generators on electric craft as an interim fuel.**

2. Vision

IWA's Vision is that, recognising the government's commitment to a zero carbon future for the UK, the UK Inland Waterways Leisure Fleet should be decarbonised as quickly as possible and to the largest practical extent such that boaters and others can continue to enjoy the unique nature of our navigable canals and rivers with minimum loss of their historic character.

3. Background

The previous UK Government's "Clean Maritime Plan", published on 11th July 2019, aimed "for all new UK-based leisure vessels designed for inland waterways to be zero-emission capable by the end of 2025."

This Plan appeared to recognise that this is likely to involve hybrid electric propulsion systems due to current limitations in battery technology and charging infrastructure and the cost, supply chain and technical issues associated with implementing hydrogen fuel cells or other 'alternative' marine fuels on small leisure boats.

The current government has replaced this policy document with a new document entitled "Maritime Decarbonisation Strategy" published by the DfT on 25 March 2025. This new document does not appear to offer a decarbonisation strategy for Inland Waterways vessels.

Another factor that points towards electric boats is the future availability of diesel engines. Most, if not all, modern diesels installed in canal boats are based on mass produced diesels intended for road and other uses. If such engines are phased out and are not available to be marinized, the cost of alternatives, if available, would likely be prohibitive.

Most builders of inland waterways leisure boats are now offering electric drive options. The overwhelming majority include a back-up, usually diesel powered, generating capacity of some sort as it is recognised that without it any meaningful cruising is not currently possible. This can be considered a transitional situation until one or more of the three problems identified above are resolved and would appear to fulfil the objectives of the previous "Clean Maritime Plan".

It is probably fair to say that, at the present time, if the objectives of the "Clean Maritime Plan" were to be implemented, without the ability to install a back-up generator, much of the business of inland waterways boat builders would be at risk.

Whilst supporting the above, the IWA Sustainable Boating Group recognises that the large existing fleet of inland waterways leisure boats will have a long life and, for cost, complexity and other reasons, most will not be converted to electric drive. We also recognise, as confirmed by the recent ICOMA report, that replacing serviceable diesel engines with a long life remaining with electric drive is not usually sustainable on an embedded carbon basis.

The IWA Sustainable Boating Group has explored Hydrotreated Vegetable Oil (HVO) as a sustainable "drop-in" replacement for mineral diesel on the Inland Waterways. It reduces CO2 emissions by up to 90% and we have found it to be entirely compatible with all types of diesel propulsion used on the inland waterways, from historic to modern, and with other diesel burning appliances commonly used.

It has a cleaner burn than mineral diesel, especially in respect of NOx and particulates, and is much more biodegradable. It can be added to mineral diesel at any concentration up to 100% and no modifications or adjustments are required to equipment, on board or on shore, to use it.

Being non hygroscopic it also responds much better to in tank storage in a marine environment than mineral diesel and especially mineral diesel with 7% FAME biodiesel added, as is currently the case. Specifically, it does not give rise to ‘sticky fuel’, increasingly being encountered, which blocks filters, injectors and fuel pumps giving rise to significant costs to rectify and, in some cases, safety issues.

The IWA Sustainable Boating Group also recognises that the availability of sustainable raw material for HVO (and FAME biodiesel!) is limited and therefore supports the current government policy of only encouraging its use where no other practical decarbonisation alternative is available. The government recognises that the existing inland waterways fleet is an example, with which we agree, but we recognise that HVO is only a transitional fuel until full sustainable electric propulsion of the fleet is achieved.

As a result of the above, HVO on the inland waterways benefits from subsidy under the Renewable Transport Fuel Obligation Scheme. However, this scheme is complex and HVO costs are highly variable and unpredictable which means that suppliers are reluctant to supply to inland waterways markets, retailers are reluctant to stock it, and boaters are reluctant to buy it.