



Sustainable boating

Electric propulsion is enabling emission-free shipping in vessels operating around the world

WORDS: ELISA PAVESI

When considering a replacement propulsion system for a work or recreational boat, Transfluid has a track record of working with hybrid and fully electric systems. Bellmarine-Transfluid is a leading manufacturer of turnkey systems for electric propulsion, with solutions that offer simplicity, speed of installation and ease of use for new and existing boats.

The company's current range offers customers a range of different sizes and transmissions up to 260kW. Made in Italy, the electric motors are new-generation, high-performance permanent magnet motors. The transmission solutions are extremely reliable, thanks to the company's 60+ years of production, sales and service all over the world.

Example vessels

Transfluid's marine division supplies certified products with approvals from DNV, Lloyd's and RRR registers - including LFP batteries, electric machines, hybrid modules and marine transmissions. The company has worked on applications around the world. In Goa, India, for example, a 20m passenger ferry will operate between nearby



islands. The catamaran is equipped with two independent inboard electric propulsion systems. Specifically, this vessel is equipped with two Bellmarine 130kW ShaftMasters, with two 200Ah lithium battery banks, which can also be recharged during navigation via solar panels and onboard generators.

An electric water taxi in Rotterdam in the Netherlands is another example, and showcases how Transfluid has established itself in this segment in recent years. The first in a fleet of six taxi boats launched about a year ago, the vessel can carry up to 40 people and is equipped with two DriveMaster 20W electric motors from Bellmarine-Transfluid. The boats will be responsible for all passenger transportation by water in Rotterdam and

1. The Lovers boat is a 22m-long, 35-ton passenger boat, powered by a 40kW electric motor system

2. A 12m, 15-ton water taxi in Rotterdam is powered by two 20kW motors

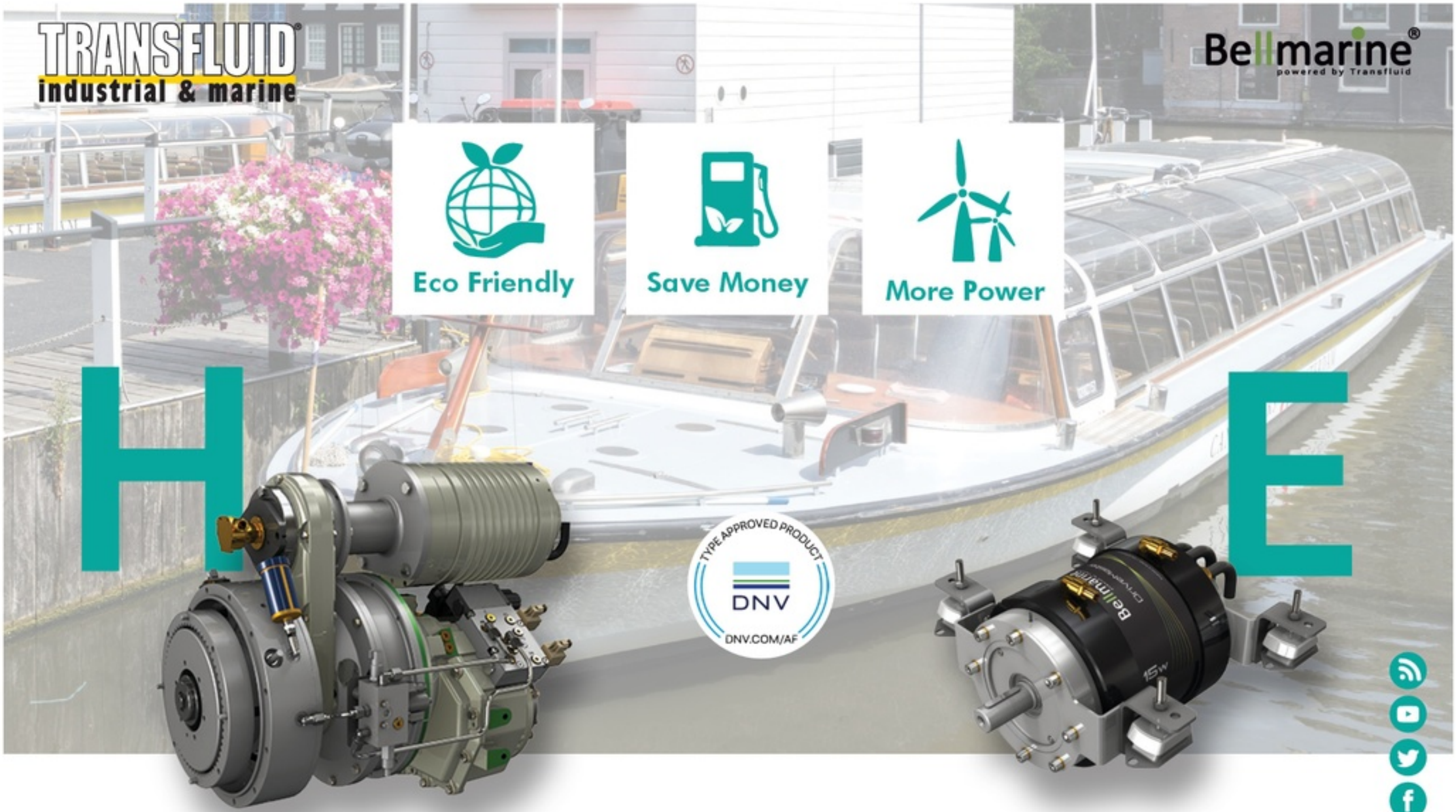
3. A 10m pleasure boat, powered by two 15kW motors and fitted with a 10kWh battery system

Schiedam. The city of Rotterdam will therefore be able to meet its environmental sustainability targets, aiming for a totally green fleet of water taxis by 2030.

Two electric passenger boats are operating on the Seine in Paris, France. The boats can carry 12 people, plus the captain, and have an operating window of 24 hours. The vessels are 8.30m long and 3m wide. Propulsion is provided by a Bellmarine-Transfluid electric system, which features two 15kW SailMaster 15Ws and water cooling, and is powered by lithium batteries. The vessels can travel at an average speed of 15km/h along the canals of Paris, with no engine noise.

On France's Lake Annecy, the Esperance III is an 18m sailing boat with a displacement of 25 tons. The propulsion system of the cultural, scientific and educationally focused vessel has been completely replaced with a pair of Bellmarine ModularMaster 40W electric systems, coupled to a Transfluid DP280 marine gearbox. The boat can reach a cruising speed of 8kts, thanks to the high mechanical efficiency offered by the Bellmarine-Transfluid system. Each system has two electric motors and two motor controllers, which allows for redundancy even with single-engine propulsion.

Finally, in Hungary, the Jeanneau NC 37 is a pleasure boat sailing on Lake Balaton. Propulsion is provided by a pair of Bellmarine SternMaster 35W electric systems and 200Ah battery banks, which provide a total of 70kW output. The Bellmarine-Transfluid inboard electric solution offers all the advantages of silent propulsion, while taking up very little space in the engine room, thanks to the small size of the permanent magnet motors. +



TRANSFLUID
industrial & marine

Bellmarine
powered by Transfluid


Eco Friendly


Save Money


More Power



TRANSFLUID S.p.A.

via G. Rossa, 4 • 21013 Gallarate (VA) Italy • Ph. +39 0331 28421 • info@transfluid.eu • www.transfluid.eu



July 21-23 2022

Please visit us at
electric & hybrid marine
EXPO EUROPE

Hall 8 Booth 1004

Electric Power by Fischer Panda

Fischer Panda electric drives are available as podded and shaft versions or as parallel hybrid and cover a performance range from 1.7 kW up to 20 kW (48 V) and from 50 kW up to 100 kW (420 V).

They are designed for leisure boats, sports boats, passenger ferries and commercial applications.

The highly efficient Fischer Panda motors feature:

- permanent magnet technology and quiet operation (no gearbox)
- high torque from the first turn, even at low speeds
- easy installation, low maintenance

You have the choice – you can cruise 100 % electrically or add a Fischer Panda generator as range extender.

Tel.: +49 5254 9202-0 • www.fischerpanda.de • info@fischerpanda.de