

TRANSFLUID AND
BIMOTOR DELIVER THE
FIRST HYBRID TAXI BOAT
TO THE MUNICIPALITY
OF VENICE

Hybrid taxi boat

www.transfluid.eu

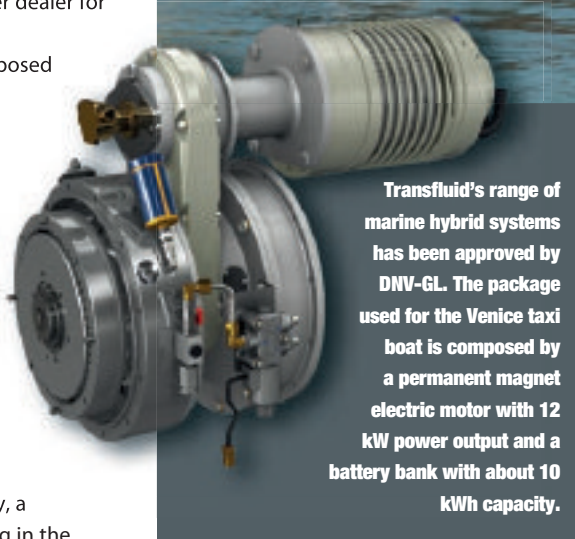
The new taxi boat for Venice's mayor features a hybrid propulsion system by Transfluid, with a marine diesel engine by FPT Industrial.

The first hybrid taxi boat for the Venice municipality incorporates a propulsion system by Transfluid in co-operation with Bimotor, master dealer for FPT Industrial's engines.

The propulsion system is composed of a Transfluid HM560-12 hybrid package with permanent magnet electric motor with 12 kW power output and a battery bank with approximately 10 kWh capacity. The system is coupled with an internal combustion engine by FPT Industrial type S30 230 E, supplied by Bimotor.

The taxi boat, which will become part of the fleet of Venice's mayor, will contribute to the city's strategy to sustainability, a topic which is particularly pressing in the Venice lagoon. The capability to propel boats through the city's narrowest canals with no noise and reduced wave formation is considered as a major plus.

The FPT Industrial S30 230 E diesel engine delivers up to 170 kW at 4000 r/min and



Transfluid's range of marine hybrid systems has been approved by DNV-GL. The package used for the Venice taxi boat is composed by a permanent magnet electric motor with 12 kW power output and a battery bank with about 10 kWh capacity.

complies with the latest exhaust emissions regulations, due to an electronically-controlled common rail injection system by Bosch and intercooled turbocharger (with sea-water cooling). The engine also features

a filtration and recycling system for the few blow-by gases which reduces the lubricating oil consumption and eliminates the few residual exhaust emissions.

The S30 230 E diesel engine is coupled to Transfluid's hybrid system and can be mounted on new builds as well as on existing vessels for retrofit/repowering projects.

The hybrid module sits between the internal combustion engine and transmission, with the hydraulic motor installed in parallel to the axis of the propulsion shaft. Transfluid said the necessary installation space is very limited and standard SAE couplings are used.

The electric motor is supplied with power from a high-efficiency lithium (LiFePO4) battery pack. The boat's autonomy can be further increased with an on-board generator working as range-extender, which will be capable of charging the batteries even during pure electric cruising.

All components in the hybrid system are designed and manufactured by Transfluid which has already successfully installed these system in various European countries both on working boats and in pleasure vessels. The range of Transfluid hybrid systems has recently obtained DNV-GL Type approval.

NPP

Plastics to power

Peel Environmental, in partnership with Waste2Tricity, has submitted plans for a waste plastic to hydrogen facility at its 54-hectare Protos site near Ellesmere Port, England which, they said, could be used to power buses, heavy goods vehicles and cars.

The £7m plant will use advanced thermal treatment technology developed by nearby PowerHouse Energy Group. The DMG (Distributed Modular Generation) technology could transform the way plastics are dealt with in the region, the developers claimed adding that the plant will take up to 35 tonnes of unrecyclable plastics a day and create a local source of hydrogen.