

BLACK SWAN, THE FIRST 100% ELECTRIC PASSENGER BOAT FITTED WITH SECOND LIFE BATTERIES COMES TO PARIS

Paris, 4 November 2019 – Today, Seine Alliance unveils the Black Swan, the first electric boat specifically designed for private or business cruises on the Seine to be fitted with second life batteries. The aim of Seine Alliance and its partners - Groupe Renault and Green-Vision - is to be able to demonstrate the effectiveness of a model based on the principle of the circular economy, in order to reproduce it and create synergies between the various mobility players.

In the current ebullient atmosphere, in which innovative solutions are being sought to preserve our planet, the initiatives taken by professionals in the river sector offer encouragement for the future. Highly mobilised around the environmental aspects of their activities, they have been the source of many exemplary projects that are setting the pace for energy transition. The Black Swan, a zero-emissions* boat with a capacity of 2 to 8 people for family excursions of around 2 hours, has been designed in this spirit. It is powered by two electric motors and needs no generator or back-up internal combustion engine. So, it won't emit any exhaust gases and proceeds noiselessly. It is a voluntary transformation approach towards reducing the impact of river activities on the environment.

As host to COP 21 in 2015 and the Olympic Games in 2024, Paris has a duty to provide innovative solutions for the environment. Seine has already shown itself to be exemplary in respect of energy performances in the transport sector. Our company has once again brought an electric boat project to fruition with the aim of raising the awareness of all of the river's users, says Didier Spade, Chairman of Seine Alliance.

Circular economy, safety and onboard comfort

The Black Swan is equipped with two wholly independent, autonomous, 100% electric propulsion lines. This redundancy means worry-free sailing.

Lithium-ion batteries taken from Renault electric vehicles once they have reached the end of their "first car life" are being re-conditioned and re-purposed. They are then installed beneath the boat's side bench seats in 4 battery stainless steel housings that have been specially designed to ensure safe, water-tight operating conditions. Thus, the energy and raw materials required to produce new batteries has been avoided.

We are proud of having contributed to the Black Swan project alongside Seine Alliance and Green-Vision. Once again, this approach has shown that, used in a second life as energy storage units, the batteries from our electric vehicles represent an essential lever for the acceleration of the energy transition, says Gilles Normand, Senior Vice President, Electric Vehicle at Groupe Renault.

Each propeller is connected to two battery arrays that have a nominal power output of 10kW (20kW at maximum power), which easily allows the boat to reach the usual cruising speeds (there is a speed limit in force on the Seine in Paris). In total, the batteries weigh 278 kg, which is lighter than the fuel tank fitted in the boat when it was powered by an internal combustion engine.

The hull, with the dynamic lines and timeless design of its Italian builder, Tullio Abbate, has been retained, but it has neither outboard nor inboard motors. Propulsion and turning is provided by underwater directional units (known as pods). This is a technical development that gives the boat a sleeker profile and makes it possible to optimise the ergonomics of the cockpit to make steering easier and ensure maximum comfort for passengers as the boat glides silently along. And those passengers are able to enjoy 2-hour cruises after a charging time of just 2 to 3 hours.

A boat to inspire the rest of the profession

The technical presentation of the Black Swan took place yesterday, Monday 4 November, at the Atelier du France. The professional from the world of river navigation gathered at the Port de Grenelle in Paris to learn about an elegant, operational boat that could inspire the 150-odd commercial boats that ply their trade in Paris' waterway, now that the migration to more environmentally friendly propulsion systems has become possible.

Demonstrations for the press will take place in the first quarter of 2020, at the same time as the Black Swan comes into service (once the necessary government permits have been obtained).

This is also when Seine Alliance will begin to refit a new analogue boat, before continuing with other boats to reach the target of a 100% electric fleet by 2024.

The Black Swan is the precursor of a new generation of boats, setting the bar for creativity, carbon neutrality and functionality, without compromising on elegance. The synergy developed with Groupe Renault and Green-Vision will allow the smart use of re-conditioned products that forms part of a truly sustainable development approach.

* zero emissions in operation

About Seine Alliance

Seine Alliance, with over 30 years' experience in the river sector, is the first Parisian company to commit to an electrification process for the whole of its fleet by 2024.

Now that it has fitted out two initial test units with electric propulsion, working with several specialist companies it has developed the engineering skills needed to commission boats that have been optimised using a reduced-carbon recycling process for tourism purposes. Its vessels are moored in the Port de Grenelle (Paris, 15th arrondissement) at the Paris Yacht Marina, the centre for private events.

About Groupe Renault

Groupe Renault has manufactured cars since 1898. Today it is an international multi-brand group, selling close to 3.9 million vehicles in 134 countries in 2018, with 36 manufacturing sites, 12,700 points of sales and employing more than 180,000 people. To address the major technological challenges of the future, while continuing to pursue its profitable growth strategy, Groupe Renault is focusing on international expansion. To this end, it is drawing on the synergies of its five brands (Renault, Dacia, Renault Samsung Motors, Alpine and LADA), electric vehicles, and its unique alliance with Nissan and Mitsubishi Motors. With a 100% Renault owned team committed to the Formula 1 World Championship since 2016, the brand is involved in motorsports, a real vector for innovation and awareness.

About Green-Vision

Green-Vision is a young company that already has 10 years' experience in the design of bespoke lithium-ion battery systems and electric propulsion. As the engine supplier for the association Les Triplettes de Bonneville, they set the world speed record for electric motorbikes in 2012, and since then have made innovations in lots of areas.

Green-Vision was one of the first companies to offer its customers and partners the use of lithium batteries from cars.

For 3 years, they have worked closely with Groupe Renault in exploring the immense range of possibilities for the re-use of such batteries. Many systems have already been fitted and are giving full satisfaction in fields as diverse as refrigerated transport, robots, static storage and so on.

The production of batteries for the Black Swan, which uses the latest generation of management electronics, continues this tradition of innovation and efficiency in the fields of energy and the environment.

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