





Press release

CWS opens operations in Saint-Nazaire to produce rigid wing sails designed to decarbonize maritime transport and create over 200 jobs by 2025.

**Saint-Nazaire**, 1 **June 2023 -** Nantes Saint-Nazaire Développement, a responsible economic development agency, and Nantes Saint-Nazaire Port are pleased to announce that CWS will be opening operations at the port of Saint-Nazaire, in a 10,000 m2 building in what was once the fruit terminal. They will be producing, assembling and testing a new generation of fully rigid, reversible and asymmetric wing sails, designed to decarbonize maritime transport. CWS plans to create over 200 direct jobs in Saint-Nazaire by 2025.

CWS offers an innovative propulsion system for the marine sector. "Our system is the result of extensive research and development to best address the challenges of hybridization and decarbonization in maritime transportation," explained Bruno Toubiana, co-founder of CWS. Its patented rigid wing sail system provides regular propulsion with limited drift effects, even at high speeds. "We have developed and successfully wind tunnel-tested an optimal asymmetrical profile that provides more power and better upwind performance. Our patented inversion system enables the deployment of a fully rigid asymmetrical wing on both the port and starboard sides while reducing the height by half and virtually eliminating drag in a symmetrical position." The wing sail developed by CWS reduces the vessel's fuel consumption by assisting the main engine, and can be deployed on both existing fleets (retrofit) and newbuild ships (direct integration).

## 50 wing sails produced per year at the Saint-Nazaire plant

The Saint-Nazaire plant will produce the composite wing components, and assemble the wing sails. They plan to start production in 2024 and ramp up to one wing sail a week by 2026. The first series of wing sails will equip an entire fleet of new container ships starting in 2025. Ultimately, the aim is to equip more newbuilds and retrofit existing ships in circulation.

### Winner with Zéphyr&Borée in 2022

In 2022, a series of positive developments further affirmed the viability of the project. Tests conducted under quasi-real conditions in a 3D wind tunnel yielded performance exceeding expectations. CWS was also awarded Corimer's government-led call for projects, with the "Mervent 2025" project to produce a 6-wing, wind-assisted container ship with a consortium comprising Zéphyr&Borée, GTT and Ecole Centrale Nantes, making it Corimer's biggest project (40% of the total budget allocated). At their Saint-Nazaire plant, CWS will produce and assemble the 60 wing sails that will equip the ships to be built by Lorient-based Zéphyr&Borée for a coalition of shippers for transatlantic sea routes.

# "Saint-Nazaire offers a combination of quality infrastructure and expertise in composites."

Among several cities in consideration, Saint-Nazaire emerged as the optimal choice for anchoring the company's operations. In June 2023, CWS will open their production plant in the port of Saint-Nazaire, near the submarine base. "Saint-Nazaire offers three key advantages: large docks for vessel mooring, substantial lifting capabilities, and high-quality expertise in composite materials." For the time being, CWS will maintain their research and development activities in Paris.

### Over 200 jobs created in Saint-Nazaire

Founded in 2016, the startup currently employs 25 individuals with complementary skills in aerodynamics, materials, mechanics and automation. Supported by Nantes Saint-Nazaire Développement, CWS has begun discussions with local partners to help ramp up their workforce. The company plans to hire over 200 employees by 2025, encompassing various profiles such as quality engineers, technicians, mechanical engineers, and more.

#### Specifications:

- Wing length: 36 meters (when deployed) and 21 meters (when folded), with a width of 9 meters.
- Wing area: 324 m2
- 60 wings to be delivered between 2025 and 2026
- CWS will be present at Wind for Goods on June 1-2, 2023 in Saint-Nazaire.

"I'm delighted to welcome CWS to Saint-Nazaire. The expertise and skills that Saint-Nazaire has developed in aeronautics, shipbuilding, and offshore wind power will be instrumental in decarbonizing maritime transportation. This further demonstrates that Saint-Nazaire is at the forefront of the environmental transition," said David Samzun, Mayor of Saint-Nazaire.

"CWS' choice of Saint-Nazaire is clear evidence of the importance of the wind-powered cargo transport sector in the Nantes Saint-Nazaire region. With the second Wind for Goods expo, our region is reaffirming its ambition to meet the challenge of decarbonizing the maritime industry, one of our strategic sectors," said Johanna Rolland, Mayor of Nantes and President of the Nantes Saint-Nazaire Développement agency.

"We seek to support innovative projects that work to deliver the decarbonization of maritime and port-based activities, and that help make Nantes — Saint Nazaire Port a major player in the ecological and energy transition of Greater Western France. We are delighted to be able to provide CWS with a solution for the production, storage and handling of XXL-sized sails, within the Saint Nazaire port area. This stage marks the establishment of an industry that has a bright future and generates employment in the Port Authority area, in the heart of an attractive region for the development of those activities," states Olivier Trétout, Chair of the Management Board of Nantes — Saint Nazaire Port.

"Decarbonizing maritime transport is one of the key factors in the ecological transition: a transition that is both respectful of the environment and a creator of jobs and wealth. The arrival of CWS and their wind-assisted propulsion system in Saint-Nazaire, home to some of the largest French and European shipbuilding enterprises, is a source of great pride for the region and its elected representatives" said Christelle Morançais, President of the Pays de la Loire Region.

> Learn more about <u>CWS</u>

# About Nantes Saint-Nazaire Développement

The Nantes Saint-Nazaire Développement Agency's mission is to promote sustainable economic development in the Nantes and Saint-Nazaire area. We work to attract French and international companies in the region's sectors of excellence, which create added value in terms of economic, environmental and social transitions. We offer a comprehensive package of services to help companies, their employees and their families get settled in. For instance, we help them find accommodation, guide them in connecting with professional networks and recruiting their teams, and support their communication campaigns when setting up their businesses in the region.

Nantes Saint-Nazaire Développement has supported more than 600 businesses over the past 7 years, particularly in the region's strategic sectors such as digital tech, sustainable industry (renewable energy, wind-powered shipping and boating), creative industries and healthcare. Over the years, the agency has helped create over 7,500 jobs in the region. Funded by Nantes Métropole, the Communauté d'Agglomération de la Région Nazairienne (CARENE) and the Nantes St-Nazaire CCI, it is headed by Nicolas Debon and currently employs 30 people.

Website: www.nantes-saintnazaire.fr/en