## CEIBA CLEAN CARGO SHIP UNDER CONSTRUTION IN COSTA RICA BY THE SAILCARGO INC. COMPANY

The SAILCARGO INC company in a shipyard based in Puntarenas, on the Pacific Ocean coast of Costa Rica, is working in the last stage to build its first emission-free cargo ship *Ceiba*, that will be finished and ready to ship sustainable goods and produce in 2023.

The mission of this extraordinary company is to prove the value of clean shipping, combining innovative, clean technologies with low-impact and regenerative systems to create clean solutions for a set of needs: from supporting vulnerable coastal communities to transport commodities at global scale.



Since its establishment, the company has characterized itself as a laboratory of environmentally sustainable shipping practices, involving passionate professionals from more than twenty countries towards the great challenge of decarbonizing the maritime transportation sector. Thanks to *Astillero Verde* shipyard association, the non-profit branch of the company, this laboratory provides workshops, apprenticeships and internships to the local and international community, setting a high standard in sustainability and responsible growth.

The company website invites boatbuilders, carpenters and researchers to join the team CEIBA at the AstilleroVerde Shipyard, to start a career and contribute to the SAILCARGO mission for a low pollution ship construction and zero emission shipping.

The SAILCARGO website presents the main characteristics of <u>Ceiba</u>, the cargo ship with 100% autonomy from renewable energy, whose construction began in 2018. Pepijn van Schaik of Manta Marine Design studio is the lead architect behind *Ceiba*.

The *Ceiba*, named after the sacred tree of the ancient Mayan peoples, is a 45m ship that will transport cargos 100% emission free. *Ceiba* combines ancient and modern design and technology. Made primarily of wood, with the hull and sail design inspired by a trading schooner built in Åland (Finland) in 1906, it will have the look of a classic trading ships sail powered. The main form of propulsion of *Ceiba* will be sails, with three masts large enough to transport goods inside. It will also have a large, uniquely designed electric motor and batteries, available when needed. The system has the means to capture energy by harnessing underwater propellers when sailing and by panels for solar power. *Ceiba* will be able to carry a load of 280 tons (350 cubic meters of cargo), the equivalent of nine standard shipping containers, and to accommodate 12 crew members and 12 passengers.









The wood for the construction of the *Ceiba* is 100% sourced in Costa Rica, a country implementing an advanced environmental protection system through a legislation and practices linking conservation and reforestation to economic growth. In collaboration with local experts, the company not only finds the appropriate trees, but also secures the environmental permit for each individual tree to be removed from the land. Many of the trees are taken down naturally by the wind, making them both locally and sustainably sourced. The species used are Hymenaea courbaril (Jatoba), Dialium guianense (Tamarindo de Monte), Cedrela odorata (Spanish Cedar) y Picea sitchensis (Sitka Spruce) and the article published in the blog presents in detail the different aspects of the materials used for the construction

Meanwhile, the <u>Astillero Verde association</u> fulfilling the company's social and environmental responsibilities, focus to support the communities and ecosystems surrounding the shipyard site, through reforestation and sustainable development activities, promoting the maintenance of biodiversity and ecological processes. Since 2018, 3,000 trees of 21 different species have been planted (9 of which endangered species), creating 13 new qualified jobs.

The goal of the SAILCARGO construction team is to launch the *Ceiba* soon, in the course of 2023. In the meantime, the company has already garnered interest for its first voyages to the north and south, from companies willing to pay a premium for the emission-free transport of products such as green coffee, cocoa, organic cotton.

The *Ceiba* eco shipyard aims to be an example that will inspire organic construction, regenerative systems and transformation of coastal communities. *Ceiba* has been funded by private impact investors from around the world who have taken the action to prove the value of clean shipping and the SAILCARGO portfolio is open to build and teach a variety of vessel designs and develop clean propulsion options, from small open boats to competitive large-scale, ocean-going ships

Their website highlights that every vessel is a solution to a specific problem or challenge. Each one is designed to fit the needs of the service it is intended for. For example, a small open boat perfectly responds to the needs of coastal fishing communities that use artisanal methods, a modest coastal schooner capable of transporting the equivalent of one container easily provides service between island chains, while larger, more modern designs can compete at a global level eliminating shipping emissions. Alongside the sails, modern engines installed in these vessels may be powered by electric batteries, hydrogen fuel cells, or algae biofuel, and have the potential to provide refrigerated cargo. Each ship would provide gainful employment in the green-blue economy sector, with skills that are transferrable to the existing maritime sector. Wooden vessels, such as the coastal schooner and the Ceiba Line ships, often work for up to a century.

With this approach, the SAILCARGO's portfolio includes a range of options, from small open day-vessels to long-range ocean carriers. Their team works with professional naval architect firms to provide designs for clean cargo ships. These ships may work independently, or as part of a greater hub-and-spoke system that offers decentralized services.

Founded in 2014, the SAILCARGO INC. company <u>has involved</u> more than 200 professionals from 28 countries who have contributed to the *Ceiba* project. This large group of professionals













dreaming for a cleaner sea and world is experimenting construction methods and technologies which hopefully will lead to launch new innovative shipyards such as AstilleroVerde in many other countries. The SAILCARGO company invites all interested actors to establish contacts to learn more and to establish collaboration.

## To know more

Shipyard SAILCARGO INC. website

SAILCARGO INC. Sea Clean Power

Ceiba SAILCARGO INC.

Careers Open positions SAILCARGO INC.

Shipyard Crew SAILCARGO INC.

AstilleroVerde website

AstilleroVerde Annual Report2021.pdf in squarespace.com

Investors Portal sign in SAILCARGO INC.

Manta Marine Design.com

Article in maritime global news

Article - How to design a sailing ship for the 21st century in LowtechMagazine website

Tres Hombres in fairtransport website

Article in madera21.cl

Article in Corclima.org

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