India’s first solar ferry sails into global contest

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‘Aditya’, representing Asia in the Gustave Trouvé Awards event, is from Kerala.

India’s first solar-powered ferry, *Aditya*, which became an icon on the Vaikom-Thavanakadavu route in Kerala, is among 12 such ferries that have been shortlisted for the Gustave Trouvé Award. It is the sole entrant from Asia.

There are three award categories:

- one for electric boats up to 8m in length,
- electric boats more than 8 m long and
- electric ferry boats (passenger boats), the category in which *Aditya* is in the fray.

Gussies Electric Boat Awards were instituted in memory of Gustave Trouvé, a French electrical engineer and pioneer in electric cars and boats. Trouvé was a prolific inventor with over 75 patents. Back in 1881, he developed a 5-m-long prototype electric boat.

**Built in Kochi**

Operated by the Kerala State Water Transport Department (KSWTD), the vessel was built by *Navalt Solar and Electric Boats, Kochi*. Buoyed by the success of the ferry and its rock bottom operating cost, the department is expected to roll out more such vessels in the future.

The founder-CEO of the firm, Sandith Thandassery, a naval architect who graduated from IIT-Madras, explained what contributed to the success of the vessel. “As a public transport solar-electric ferry, it has proven its performance in its third year, transporting 11 lakh passengers and clocking a distance of 70,000 km, without a single drop of fossil fuel. It thus saved KSWTD over 1 lakh litres of diesel.”

The per km energy cost of *Aditya* is low, and the ferry normally operates 22 trips a day, covering a total of 66 km, carrying 75 passengers per trip.

It needs just ₹180 per day in energy cost, compared to about ₹8,000 for a diesel-run ferry of similar size. It is unusual for a high technology product to have such a low break-even period, Mr. Thandassery said. The financial viability of the zero pollution vessel is such that the KSWTD, in January 2020, said that it saved ₹75 lakh since its 2017 launch.