

# Marine Research Platform: Åland sailing robots





# The project: origin and goals



Photo credit Aland UAS/ Therese Andersson

The project Åland Sailing Robots was initiated by Åland University of Applied Sciences in January 2013. In 2016, the project Marine Research Platform – Åland Sailing Robots was started, which is partly funded by the European Regional Development Fund. The goal is to construct a self-sailing boat using wind and solar energy which can be used for marine research such as sensor measurements and harbor porpoise monitoring. This project is interdisciplinary and especially connects the fields of Marine Technology, Navigation, Electrical Engineering and Information Technology.

The goal of this project is to develop Aland's expertise and innovation in navigation and unmanned autonomous and green technologies.

## Why an autonomous boat?

Robotic sailing has the potential to become a cost efficient and environmentally friendly alternative for marine research, surveillance and certain transports.

Indeed, this autonomous platform is a great alternative which is more respectful for the environment because the use of wind and solar energy decreases the need for fossil fuels. Moreover, it is also cost and time saving because it doesn't require human contribution.

This platform can thereby be an innovative solution to the researchers needs for measurements (such as marine sensor measurements or seabed mapping), but also for meteorologists or researchers in marine mammals who would like to use this platform for acoustic monitoring.



Image credit: Steve Jurvetson, 2005, Flickr, CC-BY



Image credit: Esther Lee,2011, Flickr, CC-BY

# Who is involved?

In addition to Åland University of Applied Sciences, this project involves marine research expertise and private companies. For the marine sensor measurements we are cooperating with Husö Biological Station/ Åbo Akademi University. Regarding harbor porpoise monitoring the involved expert is Holger Klinck, bioacoustics researcher at Cornell University.





### **How to contact us?**

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