

BARÖSUND

Renovation of the Barösund wastewater treatment plant in the municipality of Ingå

Type of pilot measure:

Wastewater treatment solution development

Location:

Barösund, Ingå (Inkoo), Finland

Site:

Skola Guest Harbour

Solution installed:

BioKube Jupiter biological-chemical wastewater treatment system

Treatment capacity:

170 PE

Utilisation:

Wastewater treatment for the guest harbour

Responsible: Municipality of Ingå



Preparation of the sedimentation and process tank sites, 22 September 2025



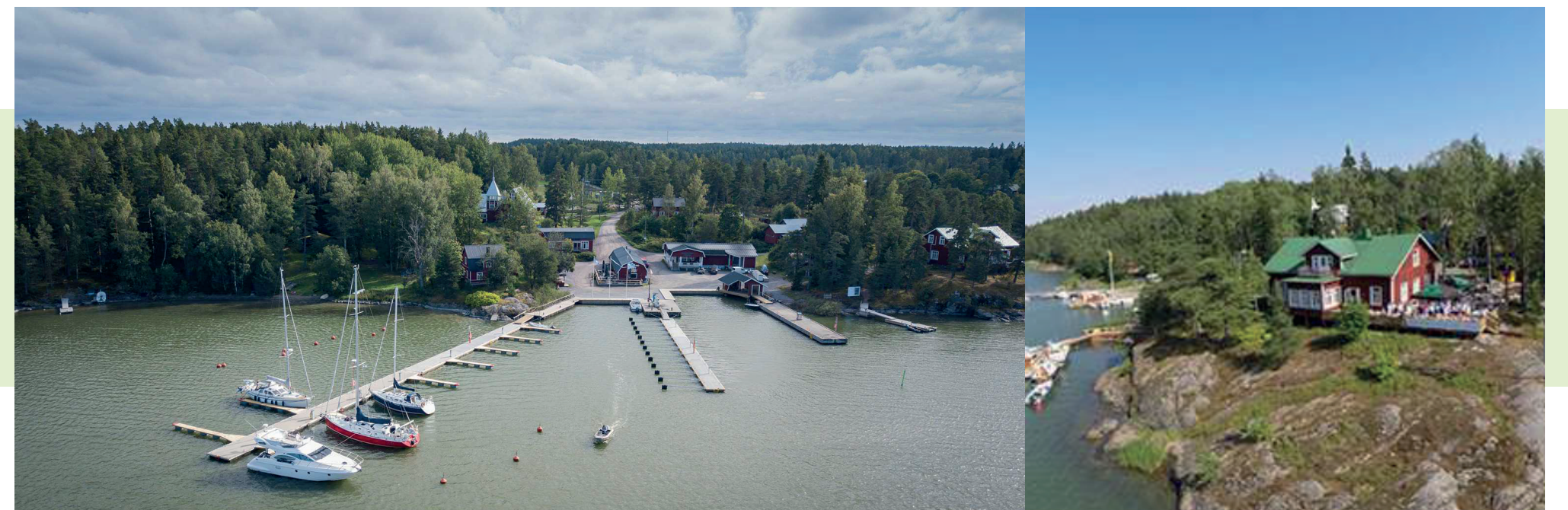
Placement of the overflow and sedimentation tanks, 23 September 2025



Completion of tank connections, 30 September 2025



Start-up of the biological treatment process, 6 October 2025



Skola Guest Harbour in Barösund, Ingå, is a popular summer destination in the Finnish archipelago. Wastewater volumes can be up to 12 times higher in summer than in winter, with 100–200 tourists visiting the area daily. During peak periods, excess wastewater was collected in a holding tank and transported 35 km to the central wastewater treatment plant in Ingå.

Wastewater analyses showed that the existing WehoPuts 30 treatment plant did not meet the required minimum removal efficiencies during the peak season. Based on the measured organic load, the required treatment capacity was calculated at 116 PE for the average July flow and 170 PE at maximum flow. The work therefore focused on the environmental permitting process and identifying a treatment solution suitable for large seasonal variations.

According to the environmental permit requirements, the wastewater treatment system must meet strict annual average effluent quality and treatment efficiency criteria (BOD₇ ATU: 15 mg/l, 95%; CODCr: 125 mg/l, 90%; total phosphorus: 0.5 mg/l, 95%; suspended solids: 15 mg/l, 90%), while achieving the highest possible level of ammonium nitrogen oxidation. Following a public procurement process, Vestelli Oy Finland submitted the only tender and proposed a BioKube Jupiter treatment system, which was installed at the site in September 2025.



Photo: Annikka Soinola, Sukli, 26.9.2025

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