



Kuressaare College – lighthouse, ship, buoy or influencer?

**TAL
TECH**
KURESSAARE KOLLEDŽ



Merit Kindsigo, D Sc.
TalTech Kuressaare, Director

UNESCO Biosphere Programme Area / Chair of Island Studies – human in ecosystem, research and analyse of socioeconomic impacts and issues, valorization of local resources and services.

■ **Designation date:** 1990

■ **Surface:** 1,518,309.7 ha

Core area(s): 36,056 ha

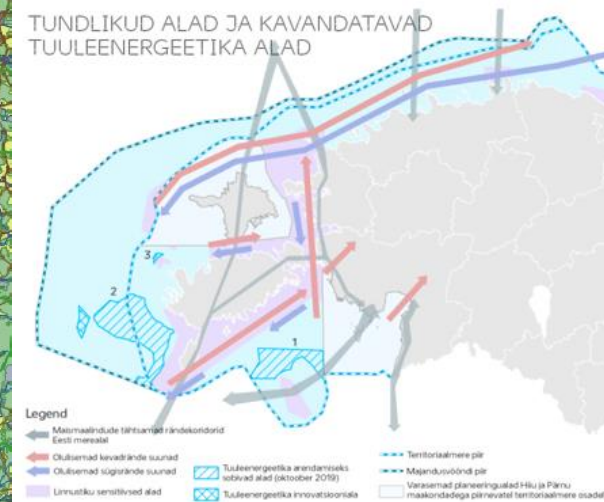
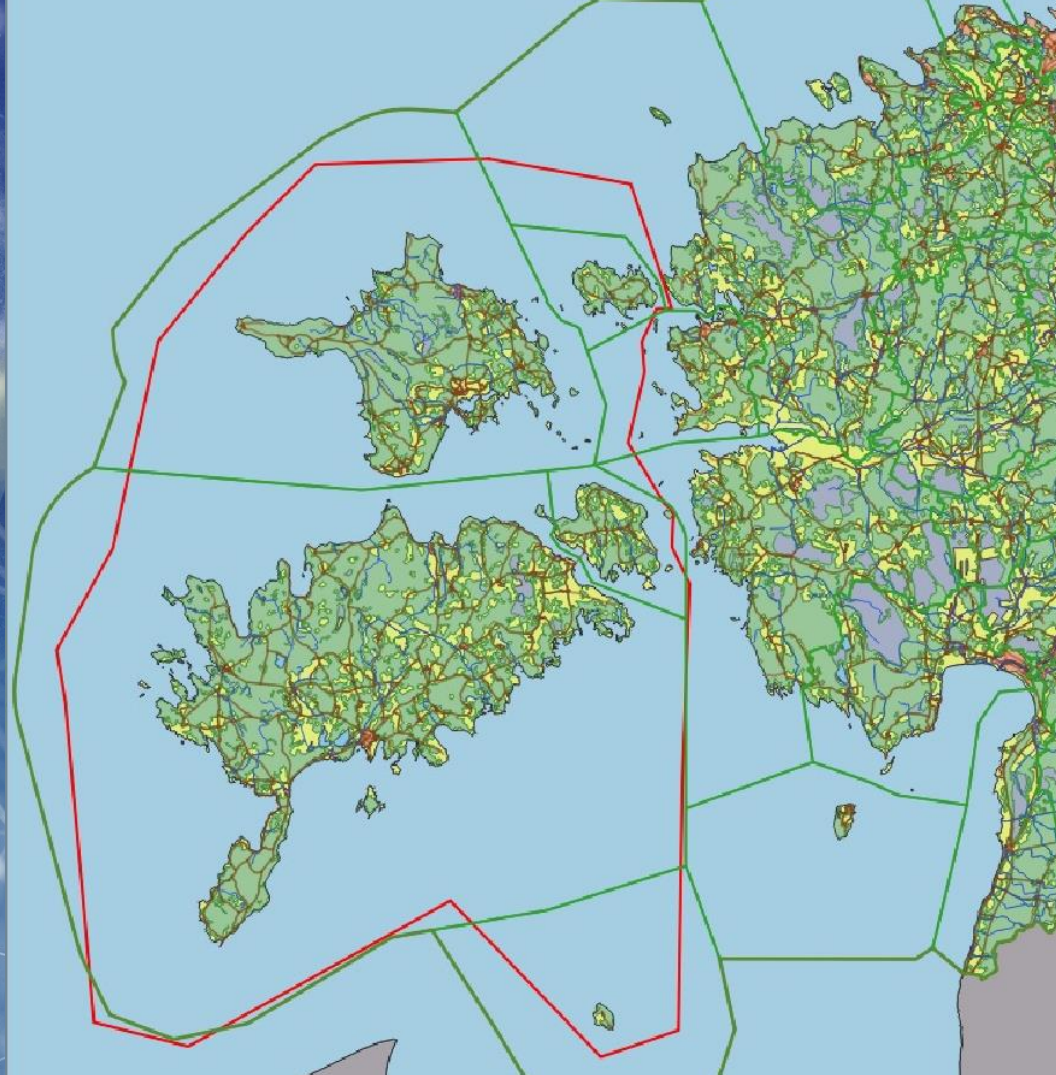
Buffer zone(s): 461,860 ha

Transition zone(s): 1,020,504 ha

■ **Population:** ca 43 000

West Estonian Archipelago in the Baltic Sea is one of the most important European bird migration routes and habitats of different species:

- Birds (over 80 sp.)
- Bats (14 sp.)
- Seals (2 sp.)
- Fishes (approx. 30 sp.)
- Other (plants, algae etc)



unesco

**West Estonian Archipelago
Biosphere Reserve
since year 1990
Man and the Biosphere
Programme**

Scientific research and R&D:

MARTE (Marine Technology Competence Centre, R&D unit of engineering)

Towing tank, laboratories

Naval architecture and hydrodynamics, materials – prof. M. Kõrgesaar
Constructions and marine technology – prof. K. Tabri

- **Dep. of Academic Affairs**
(study programs)
- **Naval Architecture and Hydrodynamics Research Group**
- **MARTE (2016)**
- **The Centre of Blue Economy (2022)**
- **The Centre of Biosphere Programme Area in Saaremaa (2023)**
- **Library, hostel**

- Shipbuilding engineering (retrofit, refit, small craft)
- Hydrodynamics Collision Dynamics (example: modelling of structural damages of MS Estonia)
- Strength and resistance assessment of different materials
- Ice-resistant structures (assessment of dynamic ice loads to structures)
- Biocomposites in marine structures (e.g dynamic behaviour of biocomposites)
- Floating offshore wind turbines (constructions, hydrodynamics, ice loads)
- Machine vision in marine technology
- Autonomous ships/marine vessels

Cooperation and partners



- Government
- Saaremaa Municipality
- Saaremaa Ettevõtjate Liit (SEL)
- Saaremaa Development Centre (SAK), Hiiumaa Development Centre (HAK)
- Other associations (wind energy, electronics industries, maritime industries, e.g. offshore wind farms)
- Companies (BWB, Est-Agar, InCap, Saare Wind Energy, Bifrost Tug Estonia etc)
- The Unemployment Insurance Fund (Töötukassa)
- UNESCO BPA (Man and Biosphere)
- Universities (in Estonia + international)
- Network on Northern and Arctic Island Studies Research
- Saaremaa Gymnasium (SG)
- Kuressaare Regional Training Centre (vocational school)
- Local communities (County's Hunting Association)
- Estonian Centre for Standardisation and Accreditation / „Hydrogen technologies“ (ISO/TC, EVS/TK) and „Hydrogen in energy systems“ (CEN/CLC/JTC) / Committee TK80

DREAM vs BELIEF...

