The InnoAquaTech Decision Support Tool for Recirculating Aquaculture Systems – introduction and (short) demonstration of the tool

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www.innoaquatech.eu

#InnoAquaTech

European Regional Development Fund

Universität Rostock

Traditio et Innovatio

InnoAquaTech - Overview

InnoAquaTech

Purpose of the project:

InnoAquaTech contributes to **cross-border development** and the **transfer** of **innovative**, **sustainable**, and **environmentally friendly aquaculture technology** within the **South Baltic Region** - a hot topic on the European Commission Blue Growth Agenda.

Partners:

1. BioCon Valley GmbH (DE), - Lead
2. University Rostock (DE)
3. AgroTech/DTI (DK)
4. Maritime Institute in Gdańsk (PL)
5. University of Gdańsk (PL)
6. National Marine Fisheries Research Institute (PL)
7. Klaipeda Science and Technology Park (LT)

Project Partner:

Running Time: 01.07.2016 – 30.06.2019

Total Budget: € 1.677.126,25

Programme: Interreg South Baltic https://southbaltic.eu/

InnoAquaTech – Key Elements

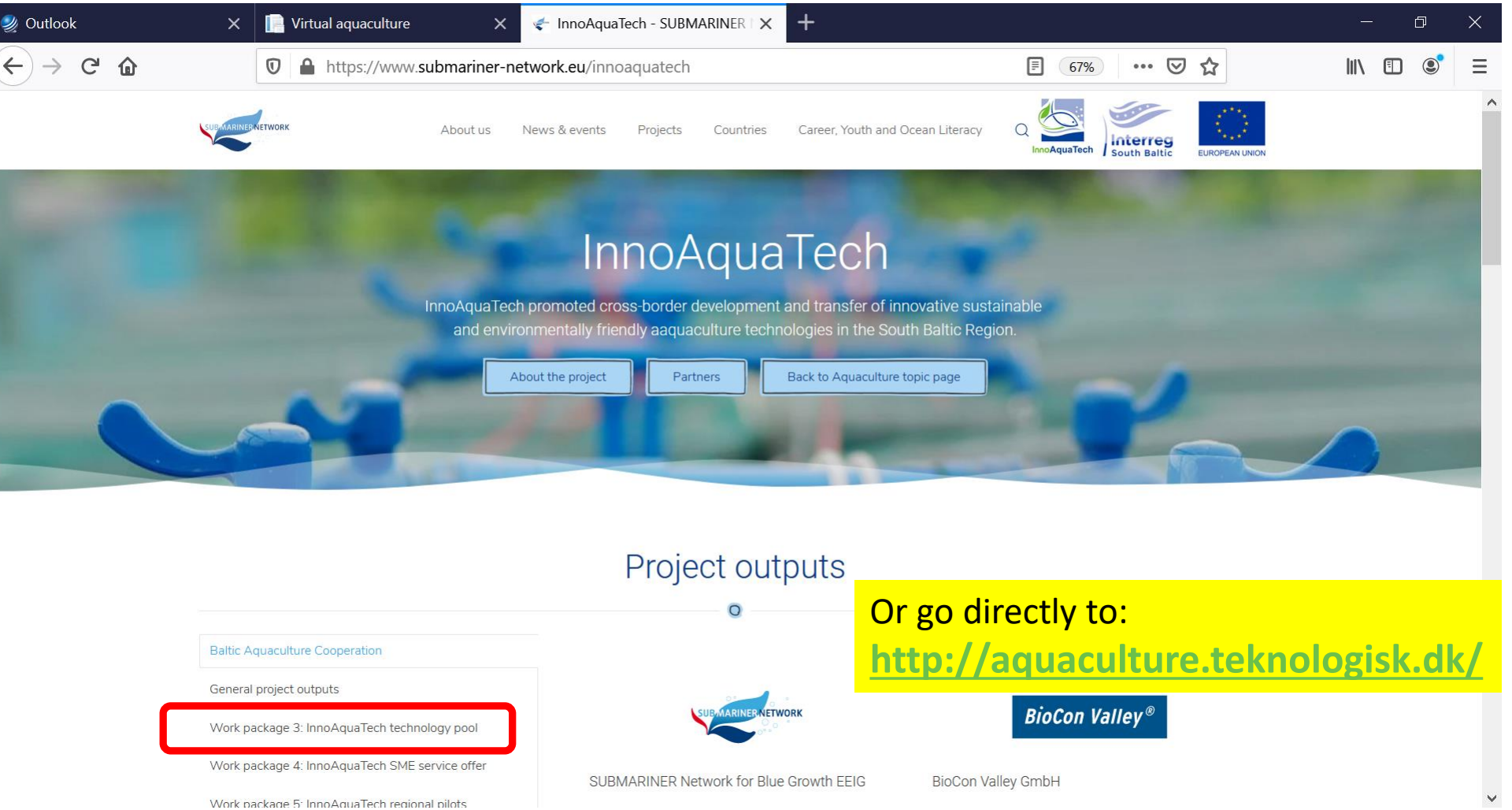
InnoAquaTech

Production:
Access to state-of-the-art technology, know-how, expertise, lifecycle analysis and financing models for SMEs

Investment:
Decision support (tool) for potential investors and establishment of a strong aquaculture economy in the SBR

Scientific knowledge (4 pilots):
Evaluation of sustainability and development of innovative and integrated recirculating aquaculture systems - RAS

InnoAquaTech – Website



Or go directly to:
http://aquaculture.teknologisk.dk/

InnoAquaTech – Decision Support Tool

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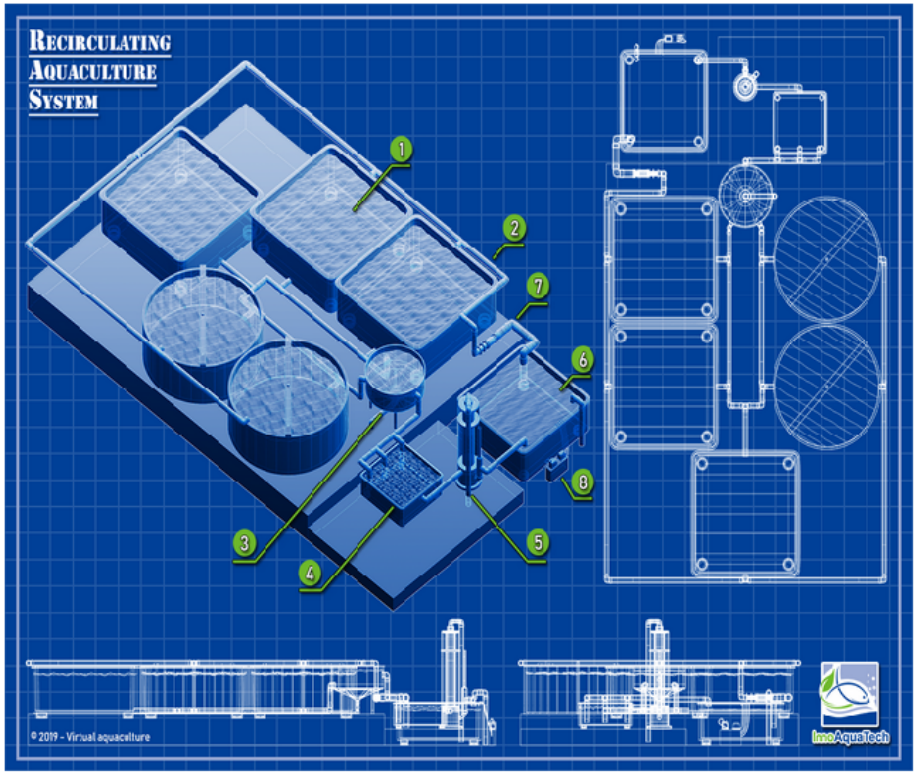
SUBMARINER NETWORK

Home | About | Technology Overview | Decision-Support-Tool | Contact

InnoAquaTech

Welcome to the InnoAquaTech Decision Support Tool



The purpose of this website is to give all interested parties an overview of how Recirculating Aquaculture System (RAS) facilities work and which aspects are to be taken into account when constructing an aquaculture system.

It is separated into two main sections:
The first section, the InnoAquaTech Technology Overview, provides information about commonly used technologies in aquaculture facilities. It describes the most important technical components, the basic principals how they work and how they are connected. It highlights their respective advantages and disadvantages.

The second section, the InnoAquaTech Decision Support Tool, lets the user set up a virtual aquaculture system and simulate its performance in terms of resource consumption (environmental aspects) and running costs (economical aspects).

The output of this simulation is thereafter presented in a set of informative graphs.

Get started!

Interreg South Baltic | EUROPEAN UNION | European Regional Development Fund

This work has been financially supported by the INTERREG South Baltic Program.

InnoAquaTech – Decision Support Tool

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Create your custom virtual aquaculture facility

Name of your Project	Blue Plattform Workshop - Innovative Technologies in Aquaculture		
Specie	African Catfish	**Currency**	EUR
Temperature for fresh water [°C]	8,0	**Price for fresh water [per m³]**	1,90
Target water temperature [°C]	27,5	**Price for wastewater [per m³]**	2,90
Water daily discard rate [%]	5,0	**Price for feed [per kg]**	1,50
		Price for fingerling [per unit]	0.6
Simulation duration in days	999	**Price for electricity [per kWh]**	0,27
		Projected sale price [per kg]	8

Create & Continue Cancel

InnoAquaTech – Decision Support Tool

Tanks

Add or edit tanks to the project: Blue Plattform Workshop - Innovative Technologies in Aquaculture (African Catfish)

(NB: Max. numbers of tanks allowed to simulation is 5)

Create New

Back to project

InnoAquaTech – Decision Support Tool

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Create a tank for project: Blue Plattform Workshop - Innovative Technologies in Aquaculture

Shape Cubic

Name of the tank 5

Height [m] 1,0

Width [m] 2,0

Depth [m] 2,0

Start weight [kg]
African Catfish 0,040

Target harvesting weight [kg]
African Catfish 1,500

Stocking density [kg/m³]
African Catfish 200

Create Cancel

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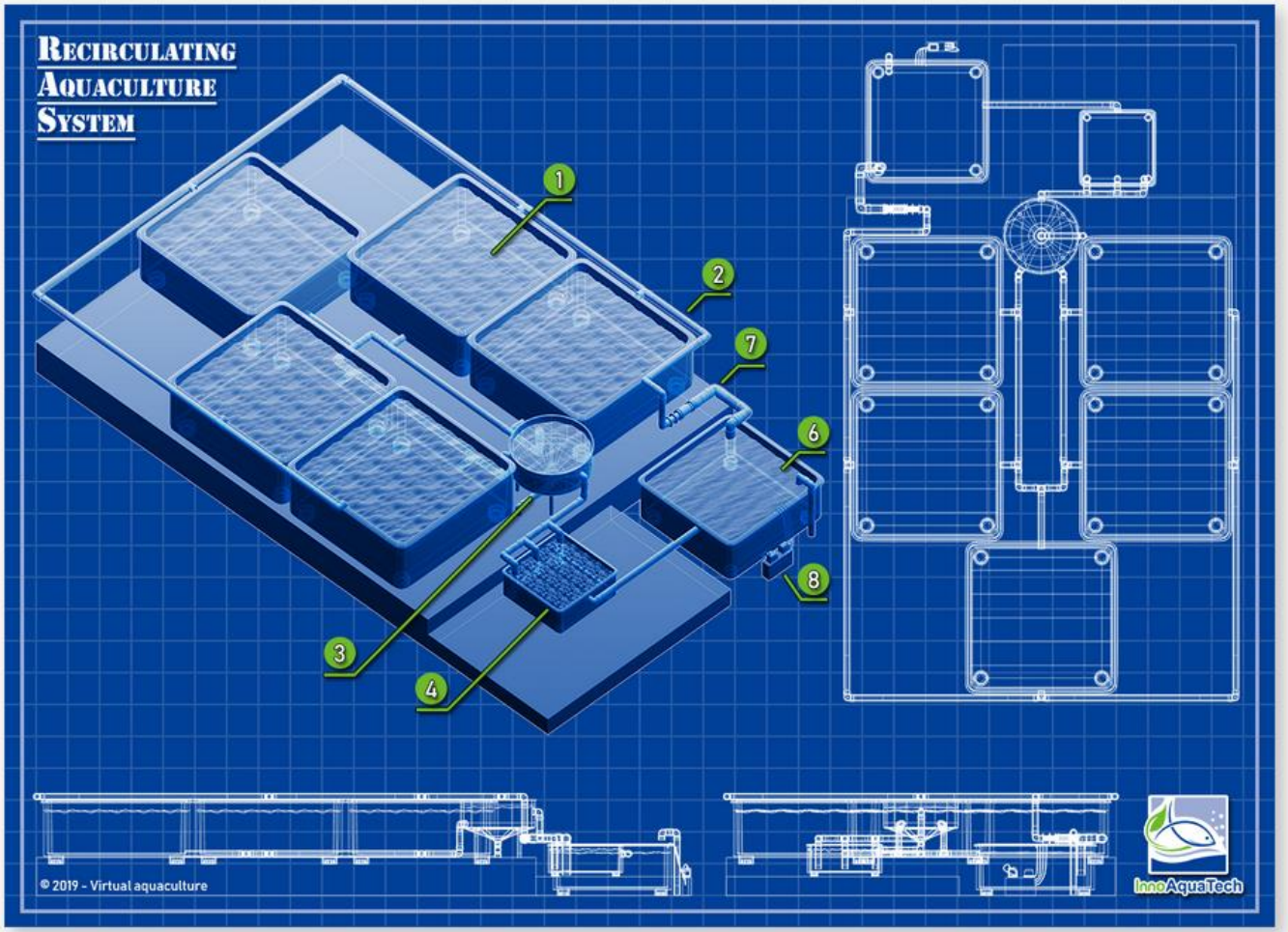
Details for your custom virtual aquaculture facility



- 1 Tanks & Bassins
- 2 Connections & fittings
- 3 Mechanical Filtration
- 4 Biogical Filtration
- 6 Sump Tank
- 7 Pump
- 8 pH-Adjustment
- 9 Aeration

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Details for your custom virtual aquaculture facility

Last update: 15-11-2020 20:43:43

Edit project
Administrate tanks
Start simulation

Depending on the complexity of your selection, the calculation of the simulation results may take up to one minute.

Remove all tanks & Reset project

Name of your Project: **Blue Plattform Workshop - Innovative Technologies in Aquaculture**
Species: **African Catfish**
Simulation duration in days: **999**
Temperature for fresh water [°C]: **8,0**
Target water temperature [°C]: **27,5**
Water daily discard rate [%]: **5,0**

Price for fresh water [per m³]: **1,90 EUR**
Price for wastewater [per m³]: **2,90 EUR**
Price for feed [per kg]: **1,50 EUR**
Price for fingerling [per unit]: **0,60 EUR**
Price for electricity [per kWh]: **0,27 EUR**
Projected sale price [per kg]: 5,00 EUR

Name	Shape	Height [m]	Width [m]	Depth [m]	Diameter [m]	Stocking density [animals/m²]	Start weight for specie [kg]	Target harvesting weight [kg]
1	Cubic	1,0	2,0	2,0	-	200	0,040	1,500
2	Cubic	1,0	2,0	2,0	-	200	0,040	1,500
3	Cubic	1,0	2,0	2,0	-	200	0,040	1,500
4	Cubic	1,0	2,0	2,0	-	200	0,040	1,500
5	Cubic	1,0	2,0	2,0	-	200	0,040	1,500

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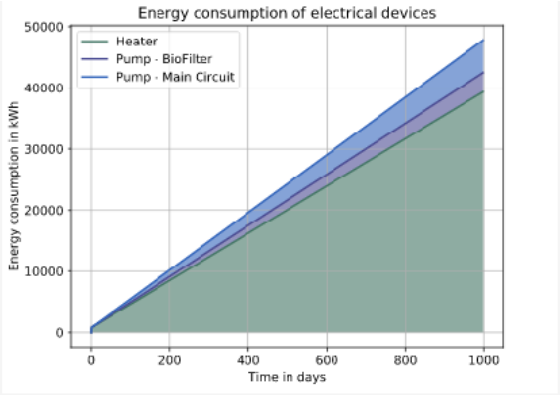

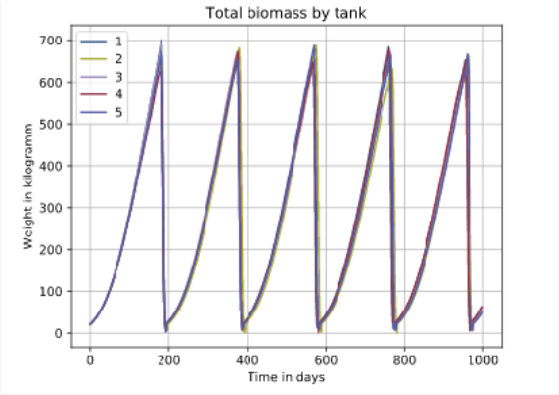

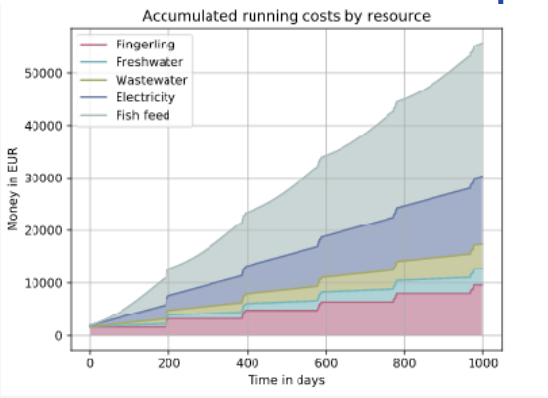

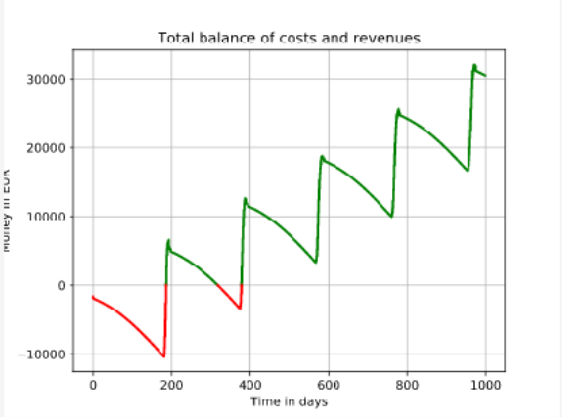

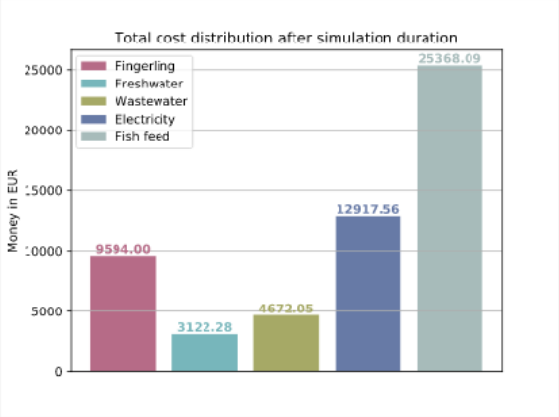

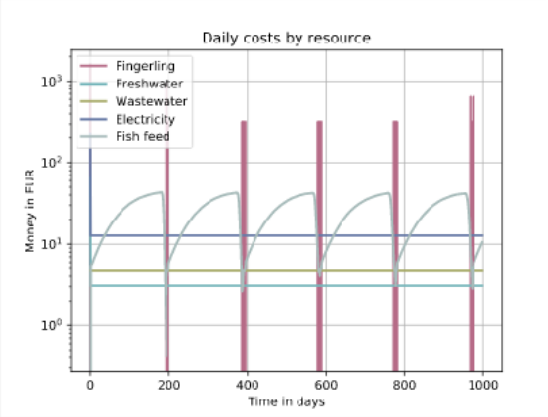

Total Energy Consumption [kWh]:47.842,83

Total Feed Consumption [kg]:16.912,1

Total amount of animals sold [kg]: 17.239,7

Total Fresh Water Volume [m³]: 1.611,05

Total Waste Water Volume [m³]: 1.611,05

Total Salt Consumption [kg]: Not available

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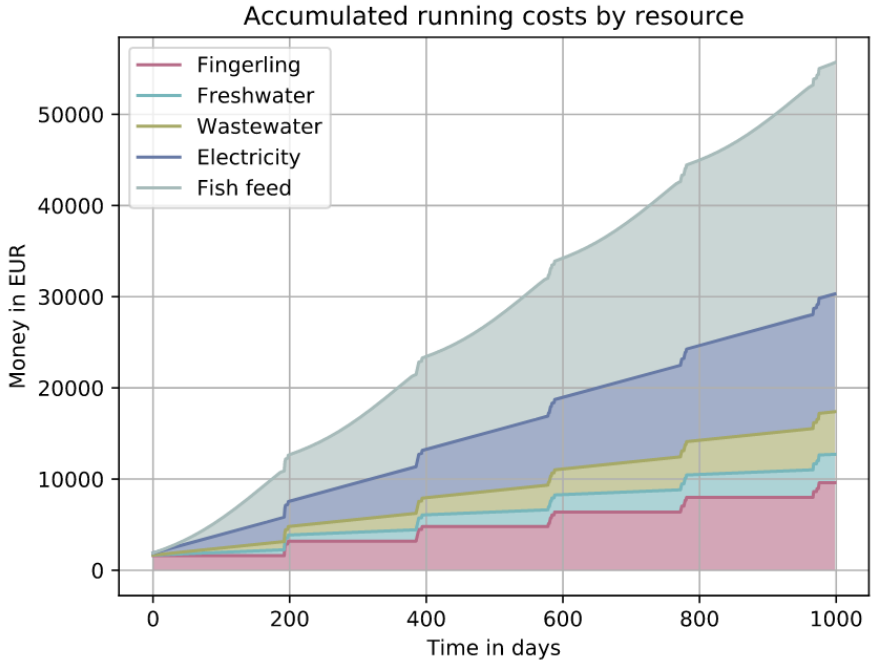

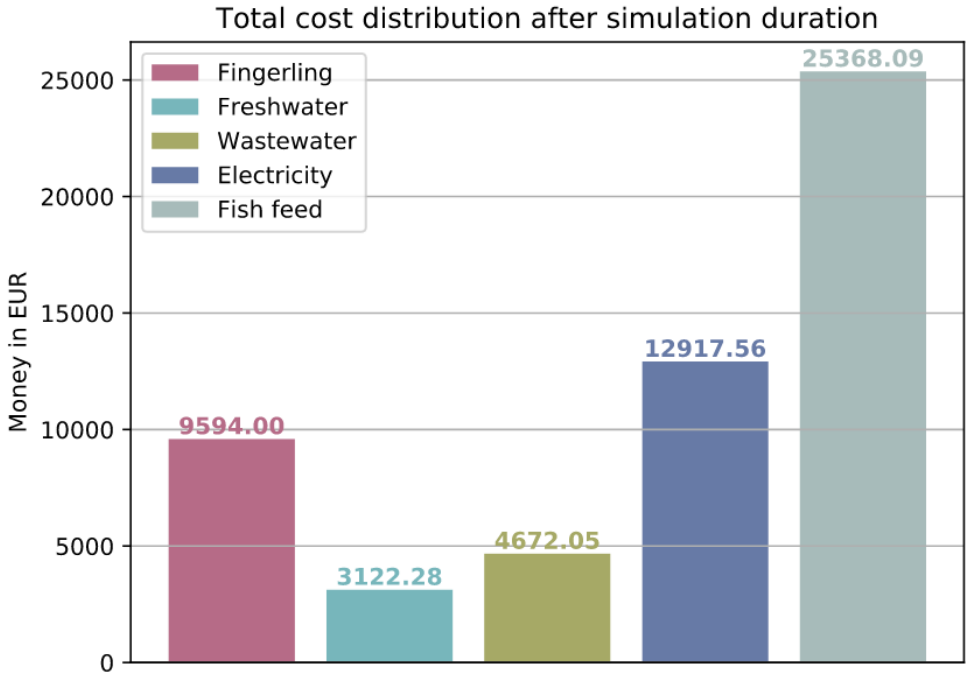

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Please visit also:
www.aquavip.edu.pl