WISA
Water Innovation System Amplifier

Interreg
South Baltic

EUROPEAN UNION
European
Regional
Development
Fund

Report 3.3

Project WISA

Report on relevant actors to involve in developing green technologies for handling storm water

Port of Åhus, Sweden

PROJECT WISA

REPORT ON RELEVANT ACTORS TO INVOLVE IN DEVELOPING GREEN TECHNOLOGIES FOR HANDLING STORM WATER.

Mapping of stakeholders with knowledge and insights in solving identified challenges in participating ports.

DESCRIBE THE IDENTIFIED CHALLENGE/CHALLENGES IN YOUR PORT:

Filtration

Filter material to take care of various pollutions, combination of filters.

Filter for quick reaction.

Filter for reduction from low concentrations.

Height difference too small in the stormwater system.

Sedimentation

Space for sedimentation in existing system. Level of groundwater creates problem to apply deep wells.

Other solutions for sedimentation in existing system, no over ground solution.

Biological pond – nutrient reduction

DESCRIBE WHAT KNOWLEDGE AND/OR TECHNOLOGY YOU NEED TO SOLVE THE IDENTIFIED CHALLENGE:

FILTRATION

As the type of pollution vary from area to area in the harbour we need to know if a general filter material or special material will give the best result when performance, cost and practical handling is considered.

SEDIMENTATION

- How to improve sedimentation in existing stormwater system?
- Improvement which can be done during maintenance work?

BACTERIOLOGY

- Bacteria can be used to reduce nutrients, oils, and many other substances.
- What can bacteria do in our stormwater?
- How will they work in our climate?
- What happened with the bacteria when they end up in the recipient?

DESCRIBE WHO HAS THIS KNOWLEDGE AND/OR TECHNOLOGY TO SOLVE THE IDENTIFIED CHALLENGE:

To find all the answer we need to use a wide range of companies, organisations and dedicated one-man business. Big companies and consultancy normally use well-proven concepts.

Creative thinking to find unconventional solutions tends to exist in small businesses and in the academia.

Those with whom the port of Åhus has worked and discussed the most are

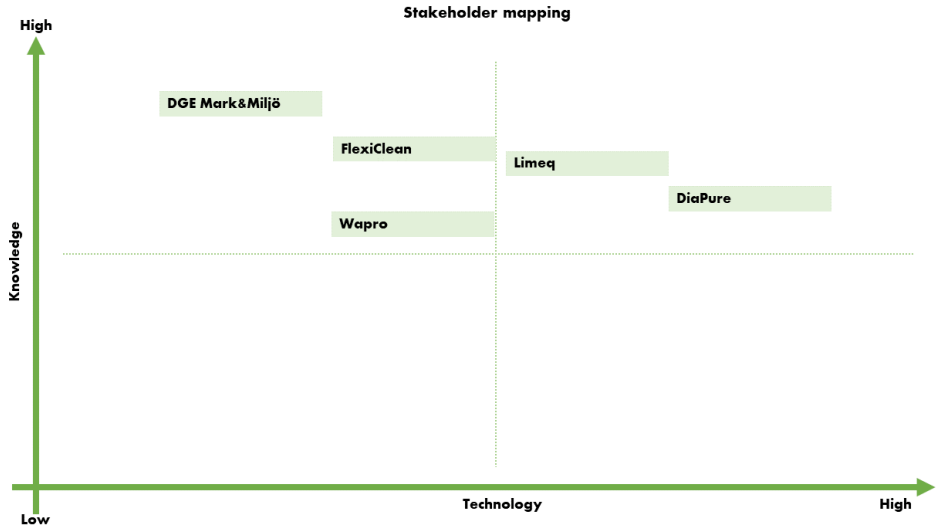
DGE Mark & Miljö, a consultancy company with 40 employees.

FlexiClean, filtrations system for grid wells and customized solutions.

Limeq, one-man company, specialist on limestone application.

DiaPure, focus on phosphorus reduction.

Wapro, check valve system, to avoid impact of seawater.



DESCRIBE WHAT CAN BE ACHIEVED WITH SOLVING THIS CHALLENGE FOR THE WISA PROJECT:

Based on our specific stormwater, technology companies can hopefully tailor optimized solutions. Acquired knowledge through the tests can give rise to new solutions and new combinations of solutions. Pre-treatment solutions in areas with only one or two pollutants and after “easy treatment” the stormwater is ready for the recipient.

DESCRIBE WHAT CAN BE ACHIEVED WITH SOLVING THIS CHALLENGE FOR THE LONGEVITY AFTER THE WISA PROJECT:

It will give other companies and organisations an opportunity to solve their problems with stormwater in more effective way, both performance and cost wise.

Project WISA
WISA (Water Innovation System Amplifier) is a 3-year project that will contribute to a cleaner Baltic Sea by developing and testing new green technologies to reduce pollution by stormwater from ports and other large hard surfaces.

The Baltic Sea is one of the world's most polluted seas. More than 45 million tonnes of fertilizer pass through the ports of the Baltic Sea annually, and the handling contributes to the release of fertilizers and nutrients into the stormwater. This leads to eutrophication with extensive algal blooms and dead seabed.