

Ecosystem Restoration with BESE-elements®

Biodegradable matrix elements
as starting point for ecosystem
restoration



Restoration needs and ecosystem functions

BESE-Elements® can serve as a foundation for nature restoration.

Wetlands, mangroves, salt marshes and shellfish reefs are productive ecosystems that can provide invaluable ecological services. However all these ecosystems are threatened ecosystems suffering from anthropogenic activities.

Damaged ecosystems often lack the following:

- 3D structures for attachment
- Reduction of local currents and waves
- Shelter and protection from predators
- Stability



Applications of BESE-elements®

BESE-elements® present a starting point: a temporary structure and protection for organisms, facilitating their establishment. After establishment, the ecosystem provides a structure on its own and during the process the BESE-elements® break down.

The potential uses for this starch-based 3D structure are almost endless.

We are just starting to uncover the possibilities of the diverse range of applications, which include:

- Ecosystem restoration (e.g. shellfish reefs, mangrove, sea grass, reefs, wetlands)
- Coastal and bank-side protection
- Water purification, sewage treatment
- Habitat creation (i.e. fish, shellfish habitat)
- Aquaculture





BESE-elements®

- Environmentally friendly and sustainable
- Side stream potato starch
- Renewable raw materials
- Carbon neutral, non-toxic product

Made of starch from potato waste the BESE-elements® degrade under environmental influences and do not need composting agents or specific temperatures.



“SOLID 3D STRUCTURES FROM POTATO STARCH”

Pilots with BESE-elements®

Currently BESE-elements® are used to stimulate the recovery of:

- Natural mussel and oyster reefs
- Salt marsh vegetation
- Dune vegetation
- Bank-side vegetation and reed beds
- Submerged macrophytes
- Fish habitat
- Mangroves
- Coral reefs
- Natural filter systems

The BESE-elements® have a wide variety of other applications.



Is there any application you may think of and want to start a pilot?

www.bese-elements.com



ENEXIO



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