



Ecological process against beach erosion
Production and recovery of filtered seawater

Your expectations

Environmental

You wish to:

- ~ protect your natural heritage and your infrastructures
- ~ protect marine life, fauna and flora...

Economic

You wish to:

- ~ optimize the surface area of the beach
- ~ develop tourist accommodation capacity
- ~ reduce beach management and maintenance costs
- ~ recover a large quantity of filtered sea water to exploit...

Practical solutions for your needs

With over 10 years of experience we have gained considerable expertise in the fight against beach erosion.

Much of the coastline suffers from erosion. The advancing sea threatens local and tourist infrastructures and the impact on the environment and the economy can be considerable.

The Ecoplage® process, discovered in 1982, controls erosion and re-establishes the eroded zone. Year after year, the beach is maintained and the coastline stabilized.

In order to meet your ever-increasing needs, ECOPLAGE has developed techniques capable of recovering filtered sea water and using it for many different applications.

Feasibility study along coastlines of varying typology





Our solutions

Environmental

- We offer a system that:
- ~ stabilizes the coastline and protects your beaches
 - ~ is invisible and silent
 - ~ respects the fauna and flora
 - ~ promotes natural mechanisms
 - ~ has no negative impact on neighboring shorelines...

Economic

- We provide:
- ~ a controlled investment
 - ~ low maintenance costs
 - ~ increased net area on the beach
 - ~ optimization of economic interests...

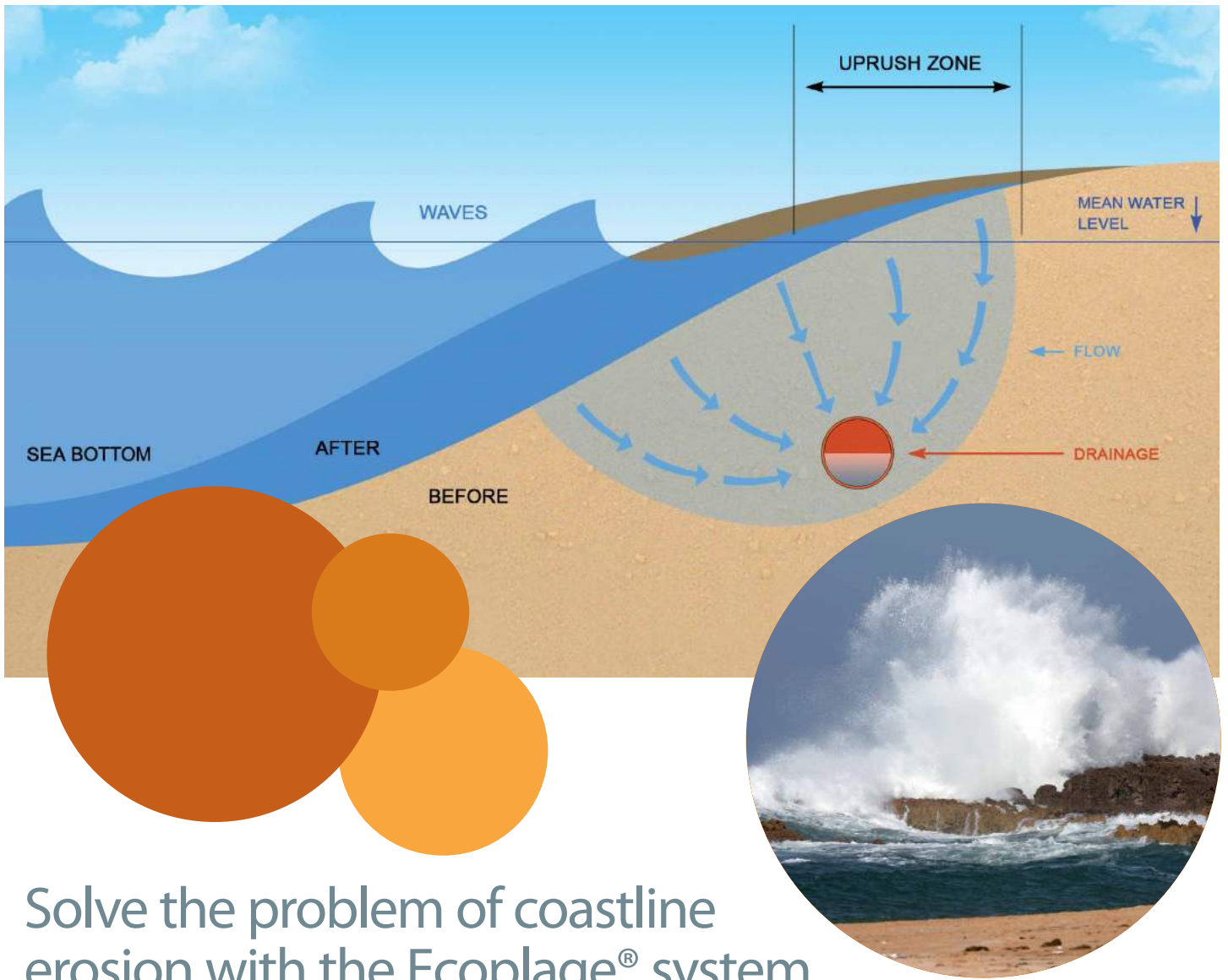
Comprehensive supply for your industrial processes

- The water produced by the system is perfectly filtered and can be used for:
- ~ supplying quantities through reverse osmosis desalination
 - ~ production of heat or cold using heat pumps and exchangers
 - ~ fish and shellfish farming
 - ~ supplying swimming pools or aquatic basins
 - ~ the re-oxygenation of basins or lagoons...

The Ecoplage® process

The Ecoplage® process consists of placing a drainage system under the beach, parallel to the coastline and linked to a pumping station. The drainage dries the foreshore, slows erosion and helps maintain and widen the beach.





Solve the problem of coastline erosion with the Ecoplage® system

It is the guarantee of a complete and adapted solution which is part of an economic, ecological, long-term project.

Operating principle

Role of the system

- ① The Ecoplage® drainage system promotes the flow of the sea water towards the drain.
- ② It lowers the level of the water table under the beach.

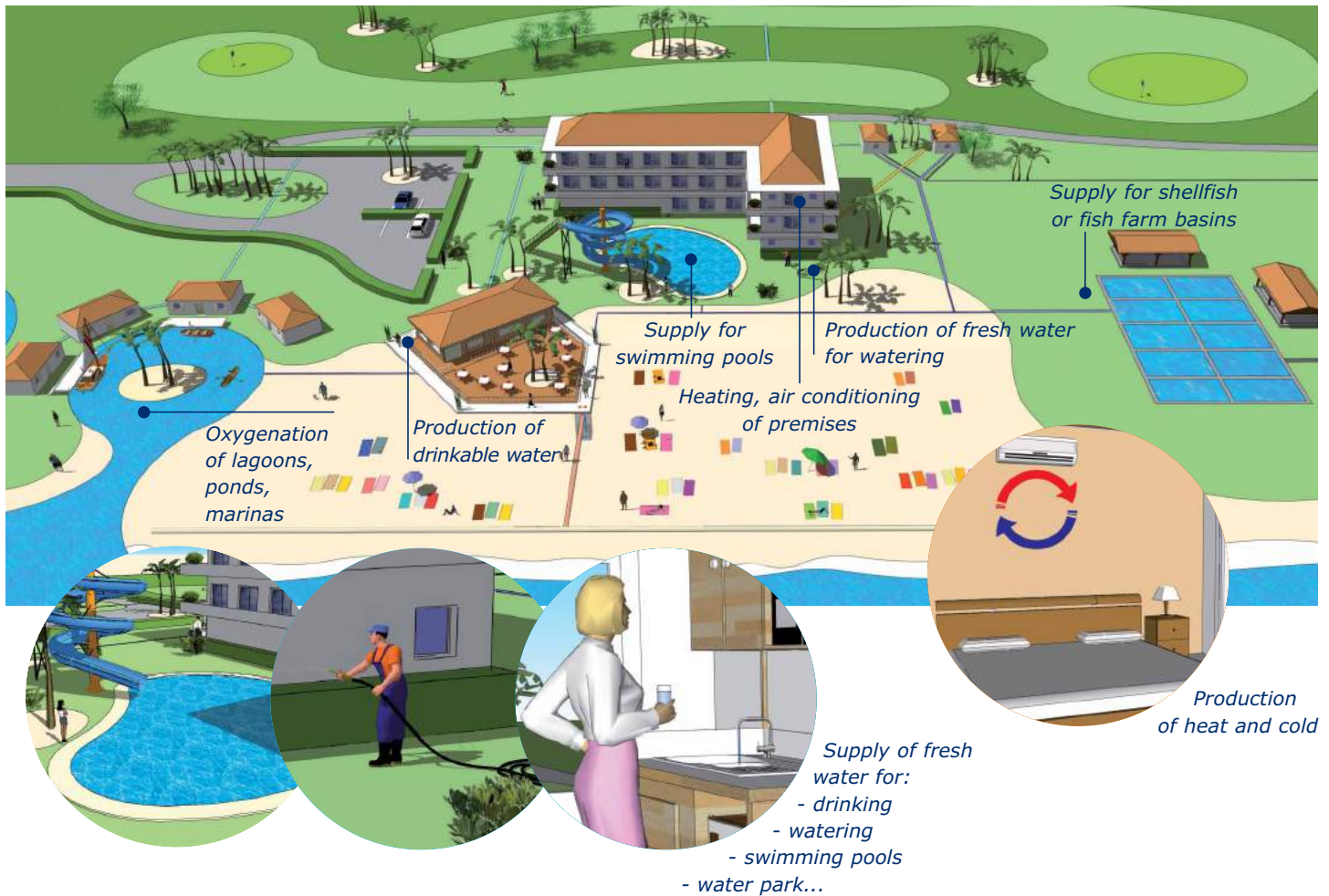
Beneficial effects

- ① Stabilizes the sediments on the beach.
- ② Increases the deposit of sediment transported by the waves thus promoting infiltration.

- ③ Decreases the export of sediment caused by the flow of the water from the grounds (land to sea).
- ④ Decreases the strength of the back wash of the waves.
- ⑤ Rapid recovery after storms.
- ⑥ Increases the effect of the wind promoting the accumulation of sand at the feet of the dunes and the sea walls.
- ⑦ Formation of sand reserves that can serve as a "buffer stock" for future storms.

The process thus helps stop erosion and maintain and widen the beach

Customized, turnkey solutions for all coastlines



Make good use of the water from drainage

The Ecoplage® process produces a significant quantity of filtered sea water, of which its impurities are removed by the sand.

The water can be recovered economically.

Numerous applications are possible, according to the businesses located near the installation site and local needs.





The ECOPLAGE solution

The installation work on the beach is completed rapidly using heavy machinery

① Evaluation of the potentiality

~ First approach concerning the adaptability of the process

② Diagnostic study

- ~ Feasibility study
- ~ Preliminary design
- ~ Drawing up budget

③ Turnkey solution

- ~ Design study
- ~ Installation



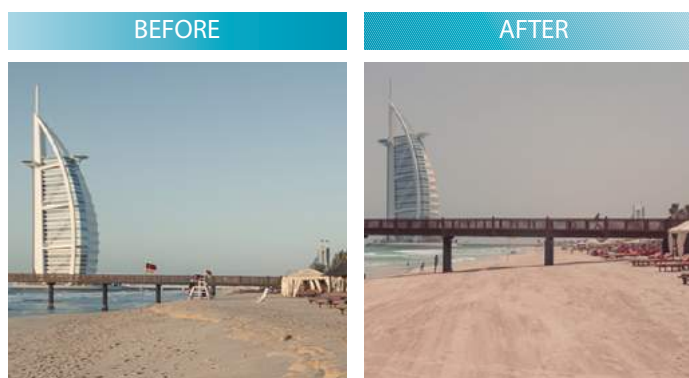
In St Raphaël-Agay the pumping station is integrated in the stairs

Tried and tested expertise

Positive results on numerous beaches

We have carried out installations on beaches subjected to the three main tidal ranges that can be observed in France and throughout the world.

LARGE TIDAL RANGE
Dubai
Tidal range
about 2 meters



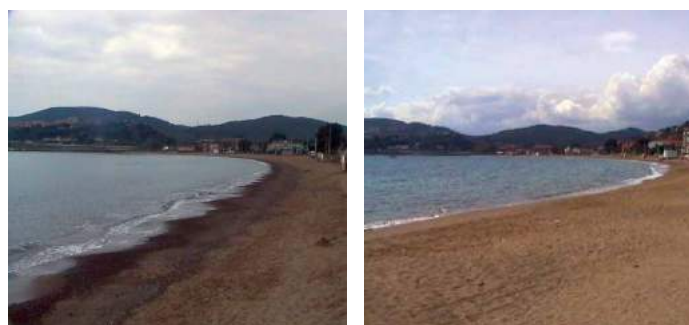
LARGE TIDAL RANGE
Quend



MEDIUM TIDAL RANGE
Les Sables d'Olonne
Tidal range
between 1 and
6 meters



SMALL TIDAL RANGE
Saint-Raphaël - Agay
Tidal range lower
than 1 meter





Projects on the five continents

ECOPLAGE
is part of a
sustainable development
and
return on investment project



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