



SPONGY LUNG is the only eco-friendly project that will mine this plastic land.

A MINE IS ROAMING !



Plastic debris is proliferating in the environment, especially in the marine environment.

Plastic debris is proliferating in the environment, especially in the marine environment, and is causing numerous problems for humans and wildlife. Plastic is not biodegradable and very little of it (less than 4%) is recycled. (The triangle of arrows around a number doesn't mean that a plastic product is recyclable.) Because it is durable and light-weight, plastic debris travels over vast distances and accumulates on beaches and in the ocean. The majority of marine debris is plastic. In the Central North Pacific Gyre, pieces of plastic outweigh surface zooplankton by a factor of 6 to 1. Ninety percent of Laysan Albatross chick carcasses and regurgitated stomach contents contain plastics. Fish and seabirds mistake plastic for food. Plastic debris release chemical additives and plasticizers into the ocean. Plastic also adsorbs hydrophobic pollutants, like PCBs, and pesticides like DDT. These pollutants bioaccumulate in the tissues of marine organisms, biomagnify up the food chain, and find their way into the foods we eat. Although plastic products benefit our lives in the medical industry, safety equipment and other technologies, it is imperative that we eliminate the flood of post-consumer plastic waste into the environment. For the sake of a healthy biosphere, including ourselves, the plastic plague must no longer be ignored. How did

the plastic get there? Estimates of plastic in the world's oceans exceed 100 million tons. Though 20% comes from ocean sources like derelict fishing gear, 80% comes from land, from our watersheds. A large segment of what ends up as marine debris is single use disposable consumer items. A bottle cap or plastic bag that falls to the grounds will be blown or washed into a storm drain, where it will flow to the ocean. Beachgoers also contribute to the problem, as does the plastics industry – roughly 10% of the debris found on beaches is preproduction plastic pellets lost during industrial processing. Notwithstanding the likelihood of increasing pelagic plastics, **SPONGY LUNG** project for monitoring micro plastics in the environment could exist because no government and no industry program currently, in sharp contrast to the widespread efforts that monitor airborne contaminants, sewage, and stormwater runoff. With **SPONGY LUNG**, the unintended consequences to the environment of the "Plastic Age" will be known; strategies will be developed to manage and exploit them



TRANSFORM THE GREAT PACIFIC GARBAGE PATCH IN A POST-MODERN DYCKE FOR VENICE.

Build Off-Shore platform to recycle the Great Pacific Garbage Patch to make the raw material.

Transform the raw material in a foam plastic sponge in high technology industries of the Pô cluster.

Install these spongy modules in strategic flood sites of the lagoon.

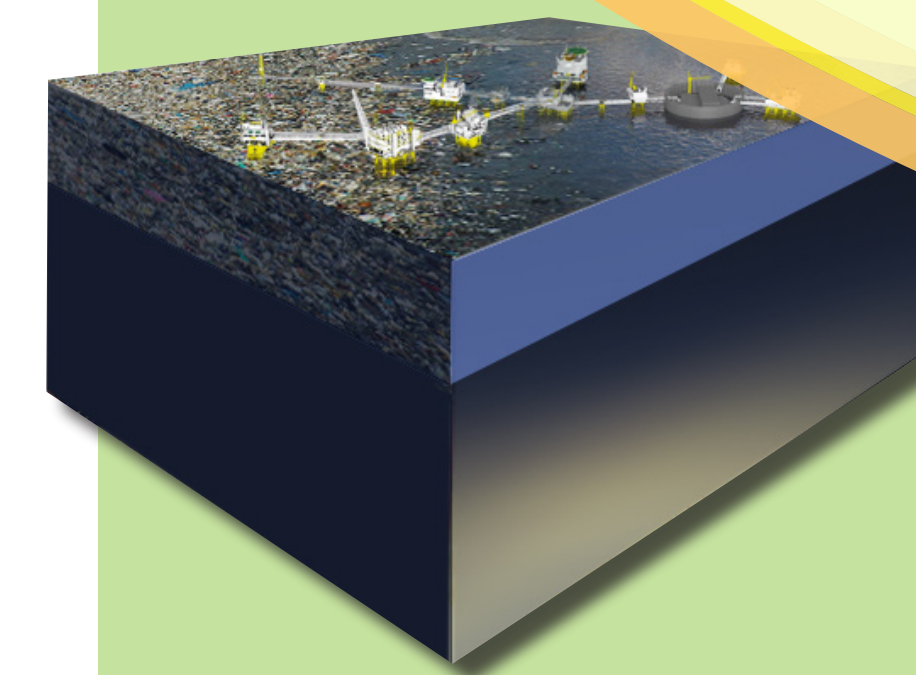


Global gyres

90% of Laysan Albatross chick carcasses and regurgitated stomach content contains plastic

To collect the Trash vortex through optimal performances

Build a network of platform



To develop shipping stocks

SPONGY LUNG

INSTALL THESE SPONGY MODULES IN STRATEGIC FLOOD SITES OF THE LAGOON.

Design Concept

The **SPONGE LUNG** project is a new plan to save Venice from Flooding.
An innovating project based on plastic recycling: the plan consists in transforming the "Great Pacific Garbage Patch" in a post-modern dycke for Venice :

AN ARTIFICIAL SPONGE-LUNG

The central design criteria for our landscape design focuses on adapting the human construction to harmonize with the cyclical flows and extremes of the natural site, absorbing and beneficially harnessing nature's impact rather than resisting it. We feel that it is very important in Venice to not dwell on the disaster as an unfortunate freak

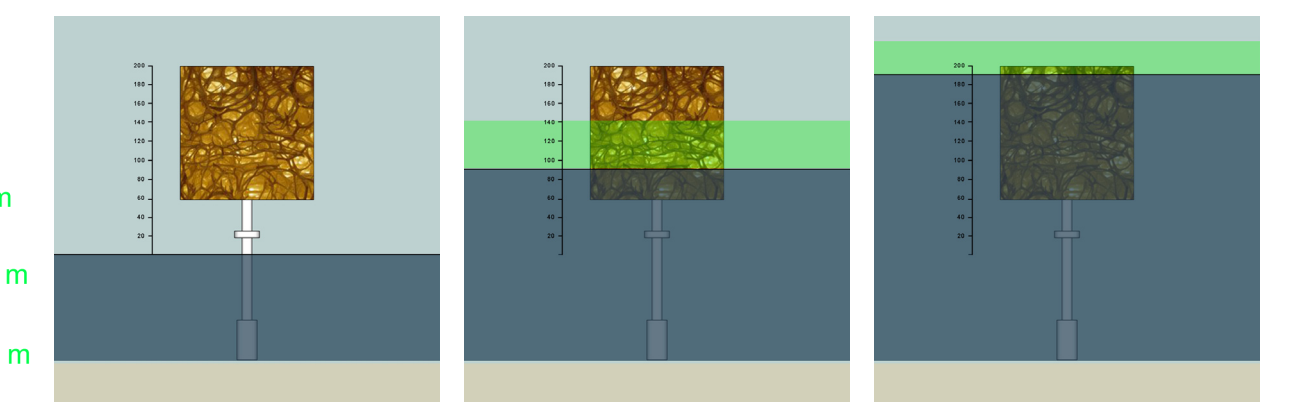
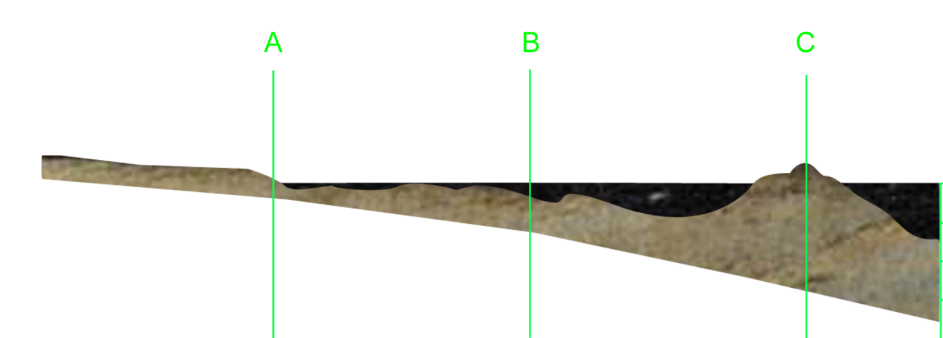
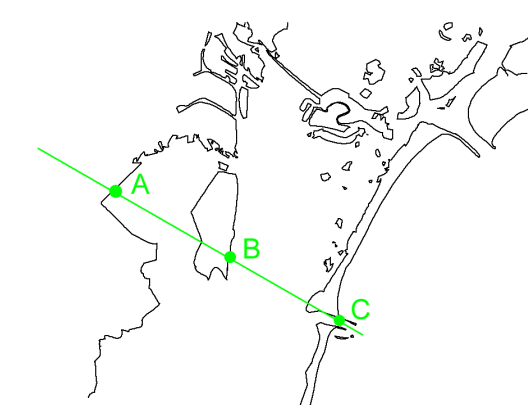
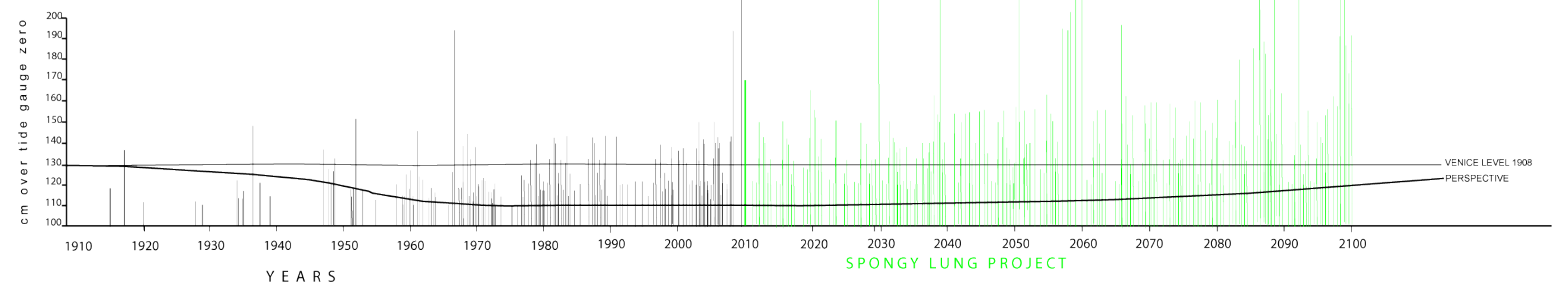
occurrence of human nature, but instead to focus on the opportunity to engage in design for alleviating a worldwide infrastructure concern, by proposing new modes of waterfront development that accommodate and celebrate natural extremes, avoiding human and ecological destruction with multi-functional systems that contribute to the quality of life each day rather than investing in single-purpose bulwarks that serve once in a lifetime yet stand as ungainly, inflexible and expensive barriers always in place.

The great pacific garbage patch and Venice are both remarkable works of unnatural environmental construction. For Venice lagoon, we will install A INNOVATIVE BREATHING DYCKE as outlined in the following pages, proposing a constructed waterfront landscape that can be rich, accommodating and absorptive, and affirming of the hopeful logic of life in the nature and culture of unique waterfront city like Venice.

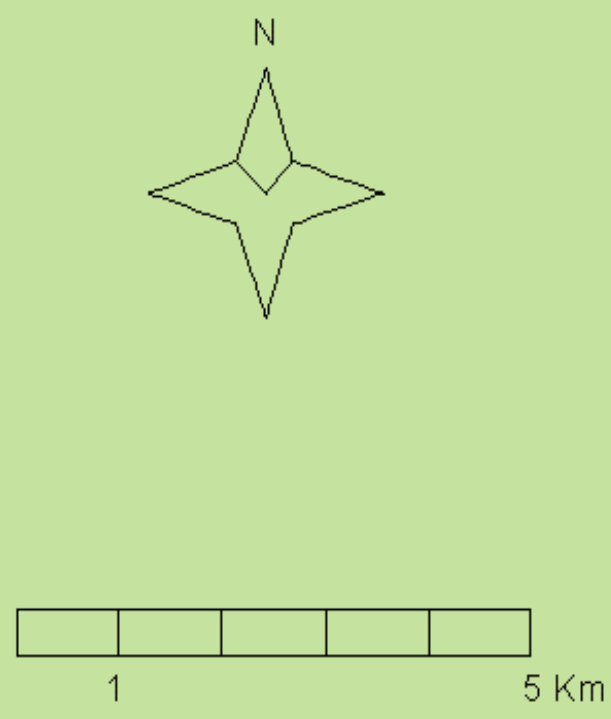
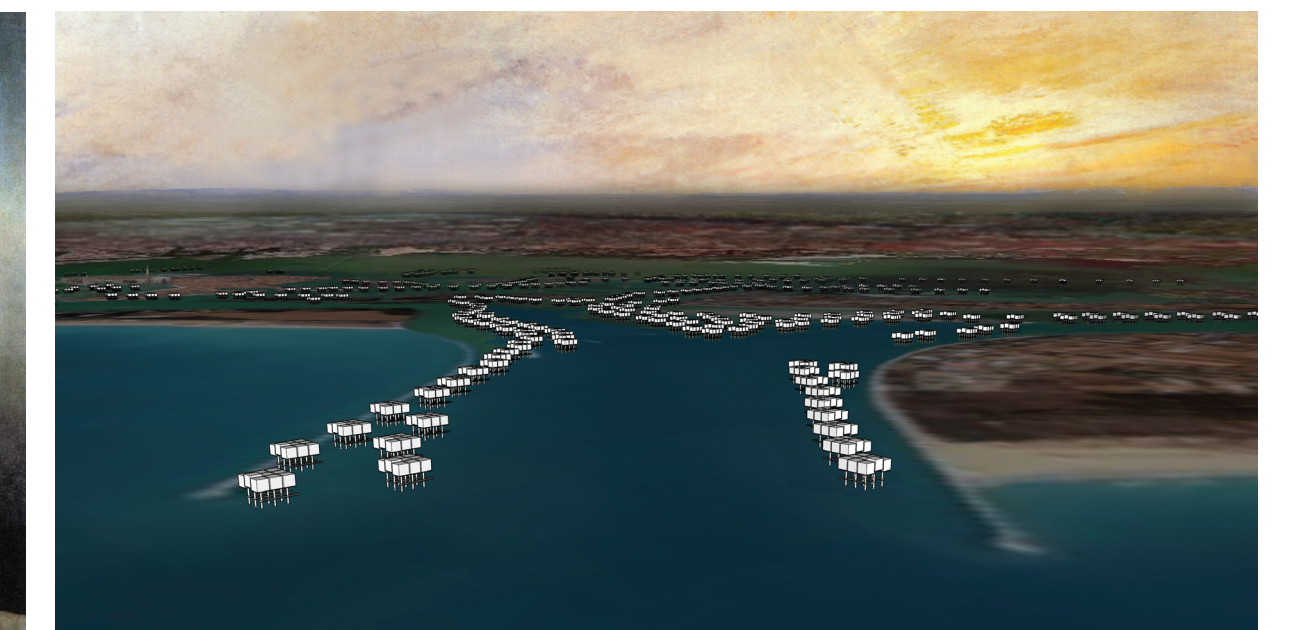
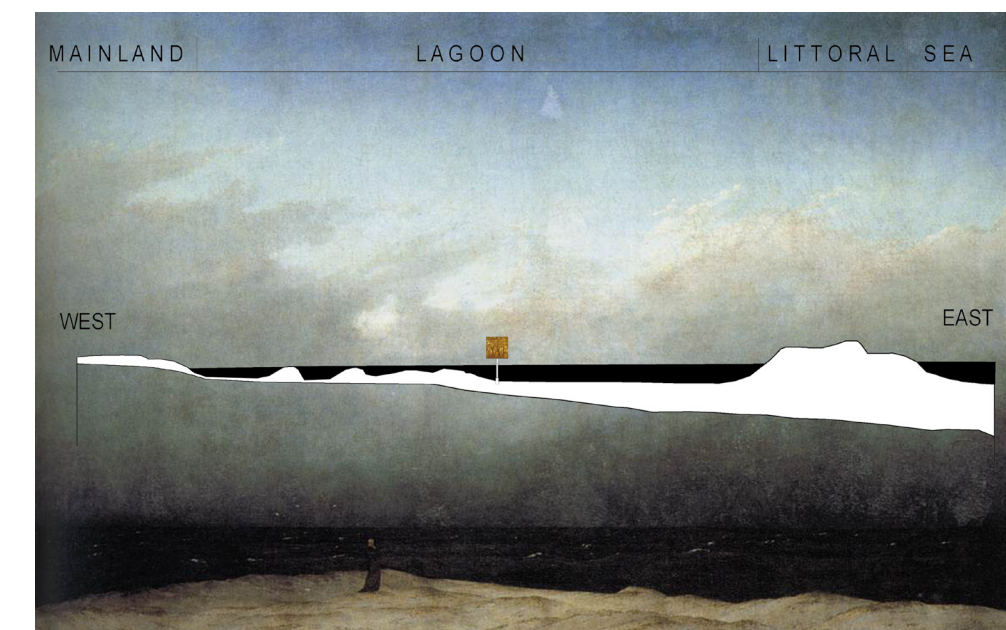
Lagoons are porous areas that enable earth and sea to breathe together. They appear as sponges or lungs; they proceed with purification.



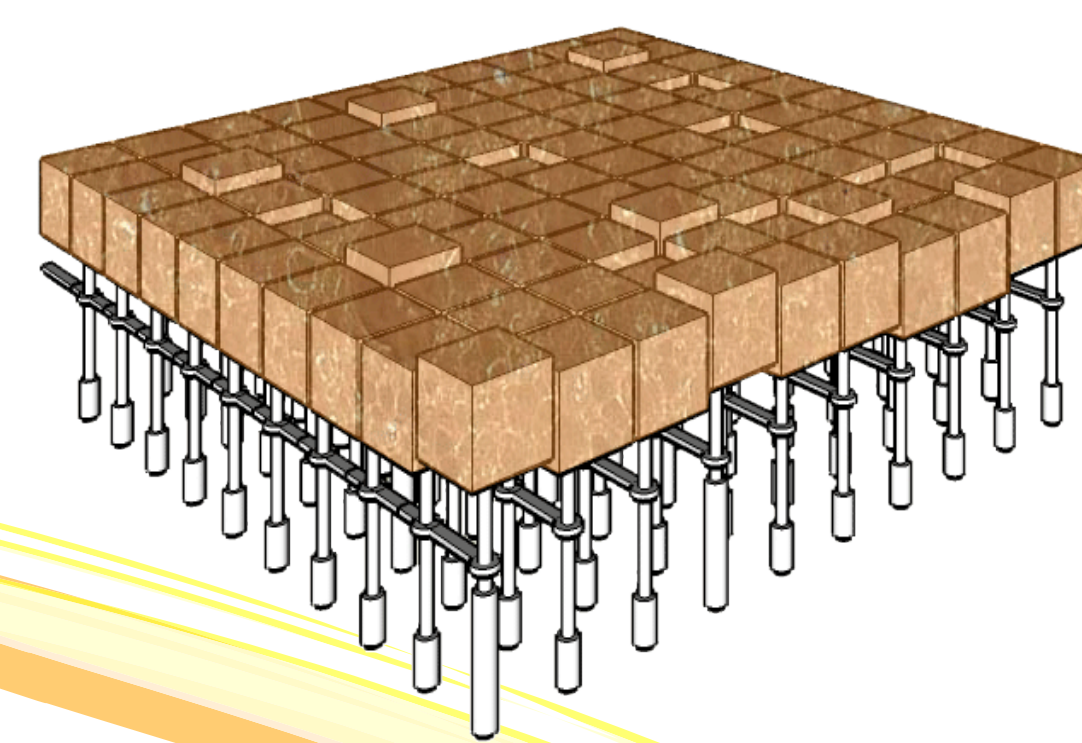
Sponge module fights subsidence.



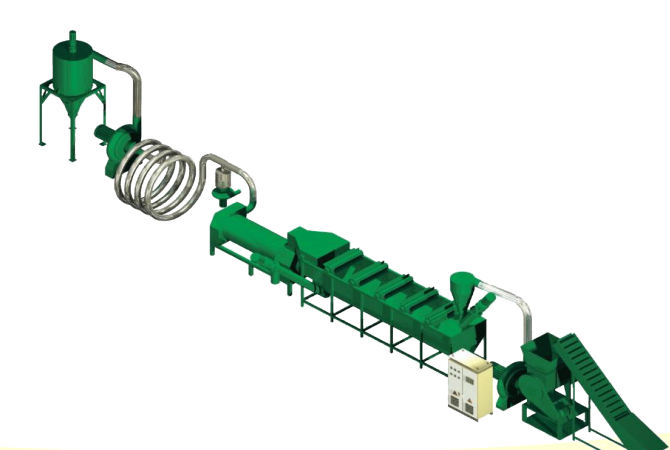
53% water absorbing (+ - 0,7%)



Starting a successful commercial sponge aquaculture farm



A innovative breathing dycke.



Transform the raw material in a foam plastic sponge in high technology industries of the Pô cluster.

To ship them to recycle

