

algaescape_copenhagen

With our algaescape we provide an environmental connection on different levels,

The first one is the technical production of energy by biomass. Here we are able to create a circular flow with the city and its infrastructure and the energy production. We gain carbon dioxide and nutrient-rich waste water and produce by photosynthesis algaebiomass and oxygen. The installation works like a filter for the city which clean the air and water. The algae can be processed for foodproduction, cosmetics and energieproduction in form of fuel or gas which again serve the city and its inhabitants.

The second level are the functions and variety of spaces and atmospheres we offer with our algaescape. These are for example an information and teaching point, an open air stage with a view over Copenhagen, a covered outdoor bar or café run by the surrounding restaurants, and several possibilities to do sports or outdoor activities all in direct impact of the algaeproduction.

In this way we connect the output of energy with the city and its inhabitants, and expose the potential of energy production by biomass with a everyday use of the algaescape and a matter of course of innercity energy production.

We started by analysing the process of energy production by algae. Out of this process we chose the part of the specific algae production, which requires the biggest amount of space, and transformed it into a both biomass producing and space providing form.

The algae containing tubes which are used in typical algaereactors where replaced by flexibel plastic sleeves and weaved to a textile. During the weavingprocess it is possible to imply different layers to the algaemesh, like a bearing structure and a suply and controlling system which is necessary for the algaegrowing. This textil is now able to form connect and affect spaces below and above it and is decisivly aligned to the algae production. Mayor effects are a varying transparency depending on the algae population and an slightly inclined shape towards the south.

The textile is like a shaped cloth which allows communication between both sides of it.

