

Aerial view of the site and then installation

ECHO OF WIND
TECHNICAL DETAILS

Piezoelectric materials are excellent power generation devices because of their ability to combine mechanical and electrical properties. When a piezoceramic transducer is stressed mechanically by a force, its electrodes receive a charge that tends to counteract the imposed strain. This charge may be collected, stored and delivered to power electrical devices.

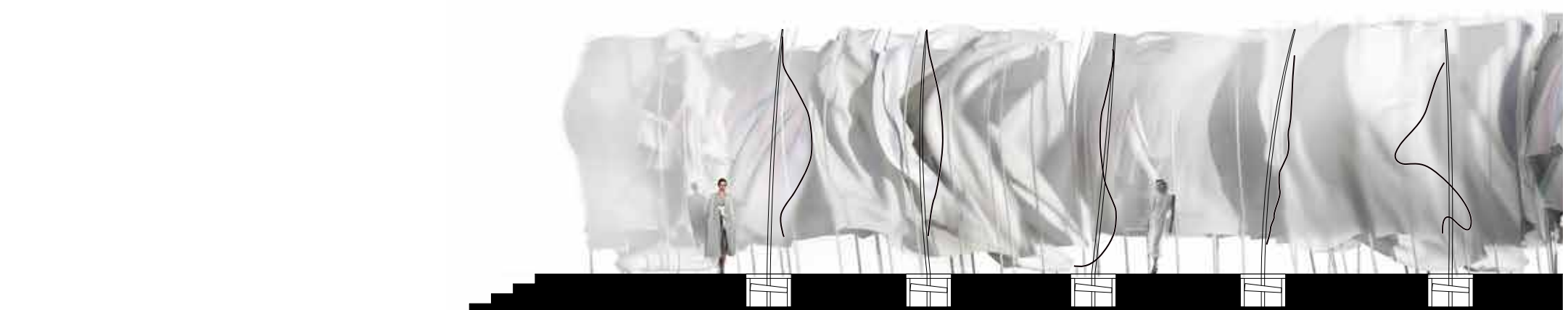
The technology is still in its early stages in terms of big scale usage, but it has a lot of potential of converting both wave and wind force into clean energy in the future. Therefore the installation can be seen as a test facility for piezoelectric energy, with the potential for collaboration with Universities and private investors to discover and explore the potential - and maybe start a new green wind adventure in Denmark.

The installation consists of an 80 cm podium of concrete in which the piezoelectric generators are embedded. The dynamic springs are made of lightweight carbon fiber, whereas the static ones are made in metal. The fabric is attached to the springs in the top and the bottom and can vary in type and transparency to create the desired atmosphere.

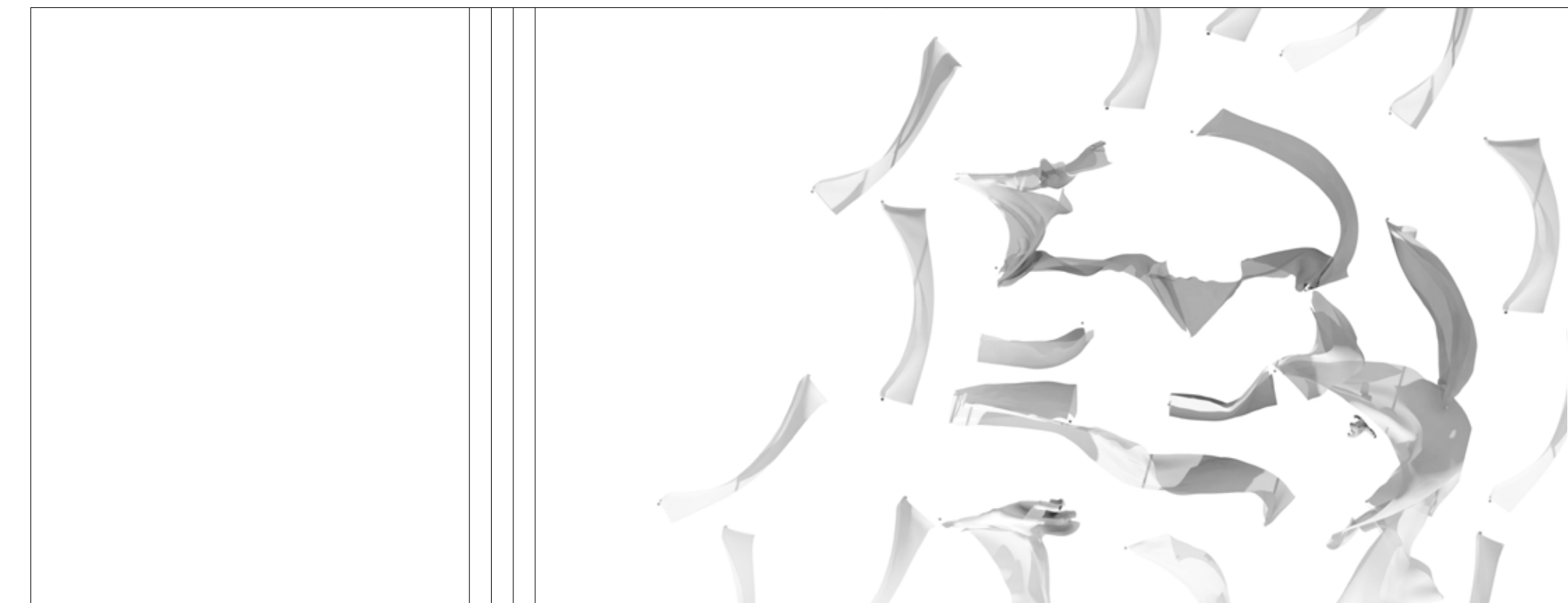
It is not possible for the visitors to interact with any of the electrical or mechanical systems, therefore making it safe for the public to use and explore the installation and enjoy its many functions.

Environmental Impact Assessment

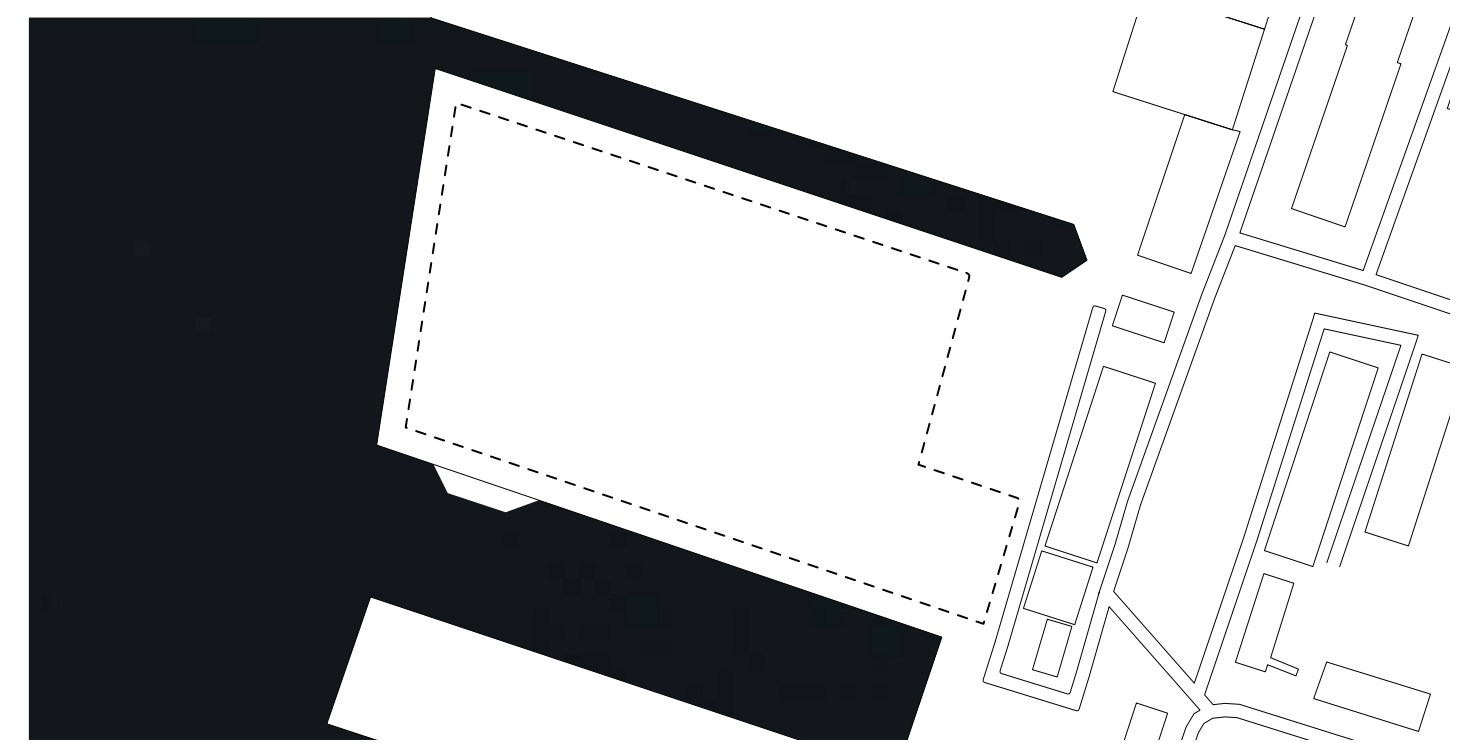
The impact of the installation on the environment and the natural ecosystem is very small. One of the most controversial moves is the 80 cm high concrete podium, which is built on top of the current site. But since the site already has major foundations from old buildings underneath, the loss of nature is minimal. The installation is not polluting its surroundings.



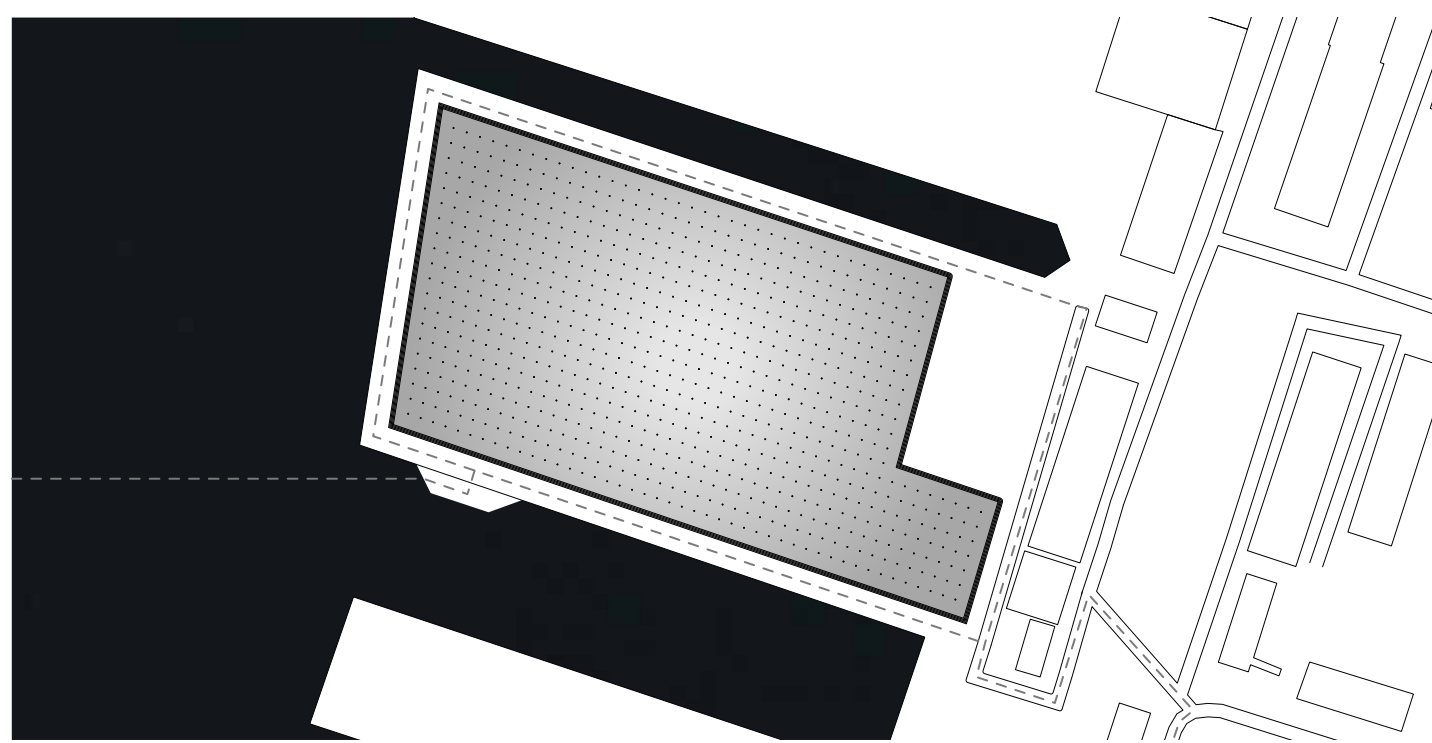
Conceptual section 1:50



Conceptual plan 1:50

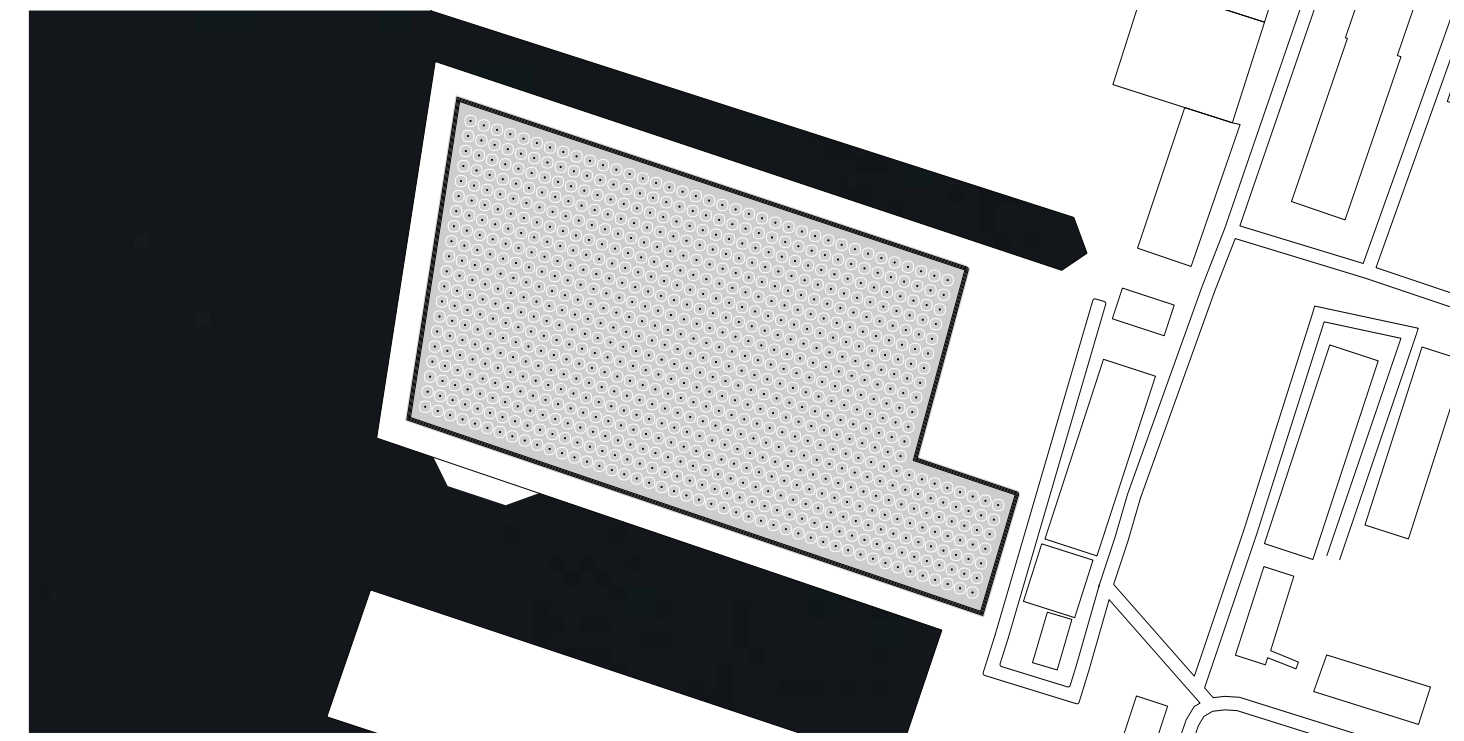


Site extension

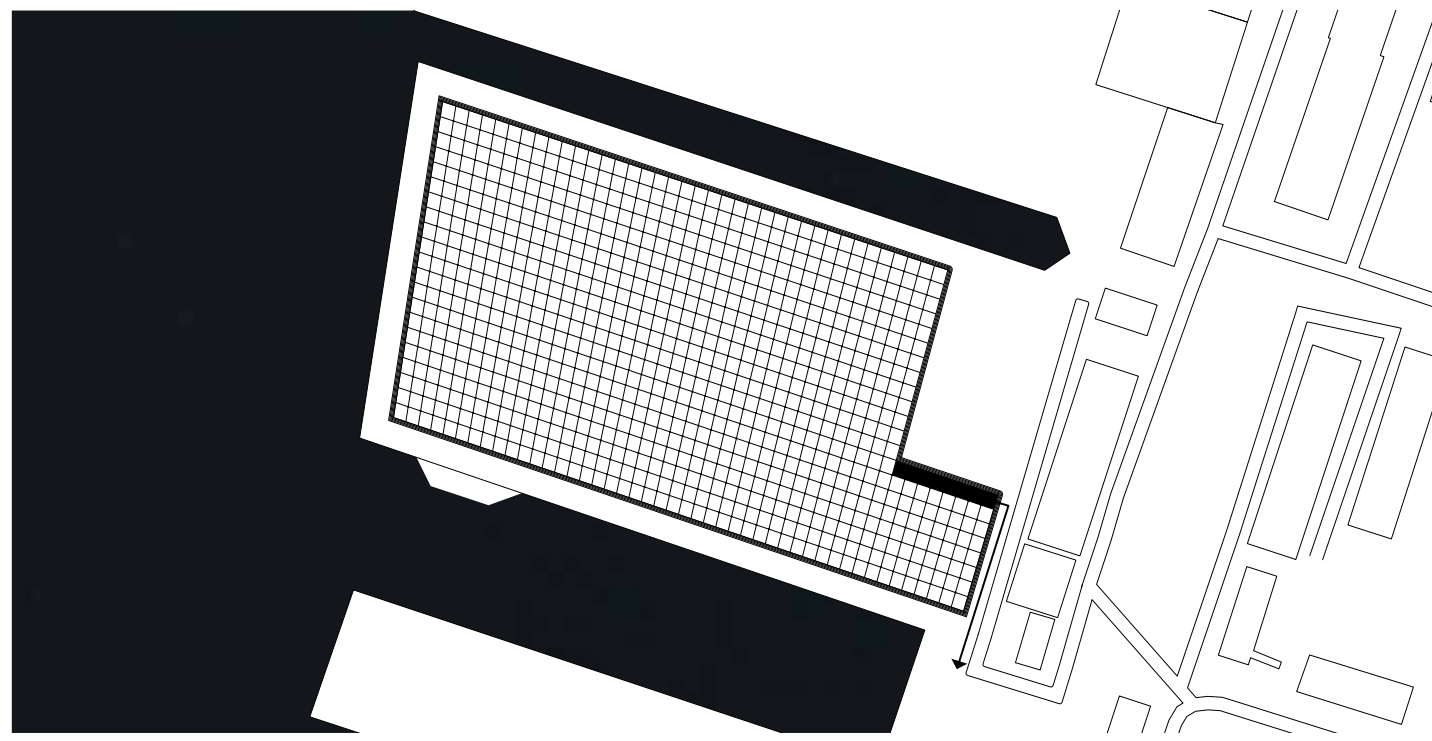


Primary and secondary circulation

Primary circulation
Secondary circulation



Podium with grid arrangement for maximum flexibility and reconfiguration



Main transformer hub and electrical circulation within the podium