**Soft Edges**

**Aspect**

**Why**

People don’t use the green space in the edges?

**Why**

People skip the trees ...

**Concept**

- **1.** Create a noise barrier
- **2.** Open toward functions
- **3.** Open sight inside-out, maneuver produce energy!

**NOISE POLLUTION**

After observing, interviewing people and analyzing the location, the main negative aspect that really stands between people and the greenery edges is the disturbing traffic noise caused by motorbikes, cars, buses, and trucks. The diagram is based on Helsingborg City mapped noise pollution. It is clearly visible how loud it is around, especially close to the north and western edges of The City Park.

How loud is too loud for us people? The diagram shows the average of various sources of noise pollution at different noise levels (dB). Loud levels depend on how people experience the noise (how much time they hear the noise and the distance from the noise). It could lead to serious heart disease, increase stress hormones, sleep disruption, and for sure the main damage is hearing loss.

**THE PERFECT LOCATION**

The strategic location of the park is right in the centre of the entire city. It takes maximum 5 minutes to walk by feet to reach various of functions and other facilities in Helsingborg City: Hospital, The Central Transportation Station, The Old town and Castle, food market, University Campus etc. All these programs are located in a walking distance less than 500 meters.

**VEGETATION**

Characteristic of the park is its large amount of diverse free-growing trees such as Japanese Magnolia, Cherry, Robinia and Chinese dogwood, which are planted in the edges of the park, creating a green forest with more than 5000 square meters that border the surrounding urban. In a harmonic way, the trees spread in between then gather in the core of the park around a fountain.

**MOVEMENT**

Based on observations during different days, times, and weather conditions, people pass through the park toward other edges to reach different functions. And if they stay to spend time, they stand or seat close to the middle of the park and skip the edges. Even though there are good benches and lighting in the edges of the park where the green trees are planted there also.

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Helsingborg - A beautiful city located in the south of Sweden on the clear sky blue Oresund Sea. It contains a 150 years old treasure: The Central City Park.

The story began 1877. A centre located land the treasure was owned by a family which later gave it to the municipality and turned it to a public land use (Stadsparken). The City Park.
Inspired from nature. From the shape of tree leaves. The Piezo is a mechanical leaf with dimension $71 \times 26$ mm, and total thickness is 0.76 mm. It is covered by a protective skin to protect it in different weather conditions, especially the cold and rainy weather in Helsingborg - Sweden.

Piezo is related to the Greek word for Pressure.

How does the Piezo do? Harvests energy from vibration.

When the cars run, they generate noise. The noise is basically sound waves. When these sound waves touch the Piezo, it makes the Piezo “squeeze itself” by vibrating up and down (just like how tree leaves react when they are in contact with air, they move back and forth or up and down).

Piezo’s vibration is a mechanical movement (mechanical stress) which generates a voltage (electrical energy). This energy can be harvested in a battery and then be used in different ways.

Each Piezo can produce at least 7 Volt when the noise is 33 dB. (The diagram shows more than 70 dB around The City Park).

10,000 Piezos cost 245 SEK (Swedish Krona).

A smart noise barrier: to reduce the noise to produce energy, for charging and lighting to bring human back to the nature.

This installation has total high 2m and width 2m. It can be easily attached together around the park in the specific edges. Green Piezos give the feeling of natural leaves. The glass with Brussound waves top will stop the noise and give the possibility to people to see the life in the park and the opposite to see the cars in the road. Electricity can be harvested in batteries or linked directly to the power plant cable system.

Possibilities and Changes

The noise pollution will be reduced because of The Soft Edges. This will bring back human to the nature and place them in between the trees. To let them breath the fresh air. To touch the green grass. To hear the sound of the happy birds. And to take a selfie at this Place!

People can charge their smart devices by the harvested energy from traffic noise. Students can read and write on their laptops in the middle of trees. There is always power to charge. In collaboration with the library, there can be outside reading spaces also Sunshine reading.

Parents will let their children go free without holding hands. Because The Soft Edges provide a physical isolation from the cars. It is a safe green space now.

Now it turns to be an efficient land use. More than 5000 sqm of beautiful environment can be filled by social interaction and activities by all people from various ages, background, gender etc. All together come and gather in the nature. People will not only pass by. They will stay and enjoy. They will see the value of the treasure. There is more space for sport, festivals, outdoor exhibitions and activities.

The installation Soft Edges can be in different colours also instead for green. The glass gives the possibilities to both sides to keep eye on each other. This increase the feeling of safety. In case any dangers happen more often keep the park sight open and it welcomes the drivers. They can join and enjoy the harmony of people and nature!