Fresh Kills, once a complex and thriving ecosystem, was degraded into a landfill in the late 1940s. 50 years later, the landscape of the landfill is being rehabilitated, but for the subject of waste, there is still no solution. In order to find an adequate answer to this, a vision is necessary.

A vision, however, is nothing static and not limitable to rules and constraints, just the way nature is. Instead, it considers the whole issue.

Due to that, we do not limit our vision of the future to the competition area, not to Fresh Kills Park, not to Staten Island. Instead, our aim is to lead the way with our project “Seeding Energy” to other related projects in the whole world. Thus, we add another component, the social aspect, to the energy and sculpture subjects and eventually create a “social energy sculpture”.

SOCIAL | ENERGY | SCULPTURE

SOCIAL Our sculpture includes the inhabitants of Staten Island and New York. People emit organic resources to the sculpture which increases its growth. In return, they retrieve energy in form of power and comestible goods.

Another social aspect is the production of “terra preta” for Staten Island and surroundings, in order to get the soil fertile again and spread the model “Seeding Energy”.

ENERGY At the moment Staten Island’s waste production is at 3600t each day. 30% of this amount is organic waste, but at present just 2.5% of it are being collected and used. The rest is inconsiderately being thrown away and contributes even more to the creation of landfills just like Fresh Kills.

In our opinion, organic waste is a useful resource; an organic resource. It isn’t only the basis of our nutrition = energy for the people, but produces energy and is able to bond CO².

SCULPTURE The sculpture is supposed to be nourished by the organic resources of Staten Island’s inhabitants. The park is going to be a growing and alterable landscape. Due to a variety of diverse plants, the site will appear in many different ways. A new range of colors, shapes and perceptions is automatically generated by the change of seasons and years. The infrastructure won’t be concealed, because without it the development of the sculpture would be impossible.

Our aim is to collect organic waste produced on Staten Island. At the moment Staten Island’s waste production is at 3600t each day. 30% of this amount is organic waste, but at present just 2.5% are being collected for payment. Organic waste has a lot of potential and shouldn’t be mixed with general rubbish.
The new soil is being applied onto the terrain and then cultivated. At first, the cultivation contains energy plants, which are partly reintroduced into the PYROLYSIS and COMPOSTING PLANT and above all will be used to produce biological decomposable bags. Later on in the process, the energy plants are being replaced with crop plants, which contribute to the local food supply. DESIGN Central element of our project is the recycLINK, which consists of three components. The already existing bridge, which will be given further purposes because of its large dimension; the PYROLYSIS and COMPOSTING PLANT which is situated on the eastern bridgehead and the third element, which combines the three components to one unit by spreading itself over the other two. The biological resource is extracted from the collected organic waste. In the recycLINK it will be dissipated into valuable BIOCHAR, compost and power. BIOCHAR will be mixed with top soil; the first soil composition will be brought up in the area of the recycLINK. The first compost will be brought up on the fields around the recycLINK in form of heaps. The next step will be the planting of the first crop plants on the recycLINK. First of all, these fields are used as test strips to control whether the plants are influenced by any remainders of the landfill. On the other hand it will be used as a community garden where visitors can help with gardening and harvesting.

The following field strips spread with the time over the mounds based on the recycLINK. They are being cultivated with different energy plants and have a flat terrain.

The fertilization of each area follows the same sequence: - creating a transport path - spreading the compost in shape of heaps along the existing drainage system, which serves later on for the irrigation of the fields - mixing the bio soil received from the compost with the BIOCHAR - shaping the soil into terraces - cultivating the created field
Along the drainage run the paths of the park. Squares for lingering and resting, as well for parking and maneuvering agricultural machinery, are created through the intersections of the field stripes. The inclined areas between the terraces will be cultivated with meadow orchards. Advanced these meadow orchards can be converted into fruit orchards, if the testing strips confirm the safety of the area. We hope that through the sensitization of the population, the amount of the collected organic waste will increase. This would lead to the extension of the PYROLYSIS PLANT and the addition BIOMASS PLANT, for an even more effective use of the organic resource. We will reach a point where only a small amount of new soil and compost will be necessary to maintain our energy landscape. With the fertile soil we can help to establish more local SEEDING ENERGY LANDSCAPES. If the test strips show, that crop plants produced at Fresh Kills Park are inedible, our cultivation will concentrate on energy plants only and will serve the production of BIOCHAR, the bio bags and of course power for the people.

BIOCHAR is a special charcoal created by pyrolysis of biomass.
PYROLYSIS PLANT is an industry that converts organic waste and lop into biochar.
COMPOSTING PLANT is the collecting point for our organic waste resources. There it gets shredded for the process in the pyrolysis plant and the composting procedure in the fields.
The output of the BIOGAS PLANT will be transported by the existing pipeline system and applied to the local power network.