Copenhagen is undoubtedly one of the most active and famous cities in environment preservation and urban beauty areas. LAGI 2014 is a very good opportunity to promote those issues even more in Copenhagen While participants working and thinking on issues of electric power generation, urban beauty and environment.

The teamwork chose an issue that seems Copenhagen's condition is not very good in it. The issue is plant shortage especially trees in city, although due to geographical situation of the city is not strange. We use TREE in our design!

Our design is a green farm, but not a real farm or jungle. This is indeed a generating farm that can generate electric power with appearance of a jungle and without any bad effects on environment.

According to the images, the design looks like a raised farm. In summary, we can compare trees with power stations, leaves with generating units and roots with transmission system. Meanwhile, there are special batteries installed on roots such as soil clinging to the roots.

Piezoelectric is the concept used in electric power generation here. In this farm, power will produce with the help of Piezo-trees. Leaves of these trees are made of special not fragile material with piezoelectric properties. Wind make the leaves of these tress move such as any other trees in the world with the difference that collision of Piezo-leaves produce an amount of DC electric current. Energy produced by a leaf is small but if we collect total energy of all leaves then we have considerable electrical energy.

The main advantage of Piezo-trees than wind turbines are: The Piezo-trees are more beautiful, no danger to birds, no need for generator or big equipment, less probability of failure.

Raised Farm has been dug from the ground and has been raised. Roots of tress in this farm are visible. They are designed to a specific shape, the roots are really vertical and horizontal arms from suitable material. The roots have three application: 1.bearing of trees weight, 2. energy transmission 3. A place for "TV-storages" installation.

How the transmission system work? Energy of every Piezo-leaf move through stem and trunk of tree to roots, energy then transfer through roots to underground where they join and attach to some electrical cables. Cables finally deliver energy to substation. Substation is a room with required equipment (e.g. converters) that convert DC electric current to AC and gives the final energy to Copenhagen's grid. But it's not all, "TV-storages" (Will be described in the next paragraph) may take or give energy to this network

And now TV-Storages, these modules in fact are 20\*20\*20 cm cubes that have installed on the roots with appropriate combination. We call these modules TV-STORAGES! One side of the TV storages has LED screen and can display colors. This side is looking to the Little Mermaid. We use the batteries whose capacity is 30Ah, the energy can charge 20 typical mobile phone. People in the farm can borrow a TV storage and use its energy for charging their electronics or any other use. They also can recharge it and bring back to network. An interesting about TV storage is that their screen enable only when they're connected to network. This screens display color in front of little mermaid and make a good view.

Our teamwork came up with the idea of putting TV storages together properly can build a huge screen. Such as LEGO parts that make a bigger thing, we can also play with places of this TVs and make a good and bigger screen. Each TV storage is considered as a pixel for "The Gigantic Screen" and different colors or different places installation will build a different picture. For example as is shown in pictures we can make picture of little mermaid who has converted to giant mermaid in the Gigantic Screen!

We tried to use mixture of technology and art for beauty of our design and make power station more pleasant and the TV storage idea tries to attract people to this power generating site.

With interesting approaches, it is possible to use farm for promoting power quality e.g. we can ask people to not taking out TV storage to charge them and when the electric power demand is high they will bring back them to charge the network. Charging also can be done with many methods including pedal charging, harvesting human energy techniques and other environmentally friendly ways.

According to calculations and estimations the produced energy of this farm would be 6000 MWH per year.