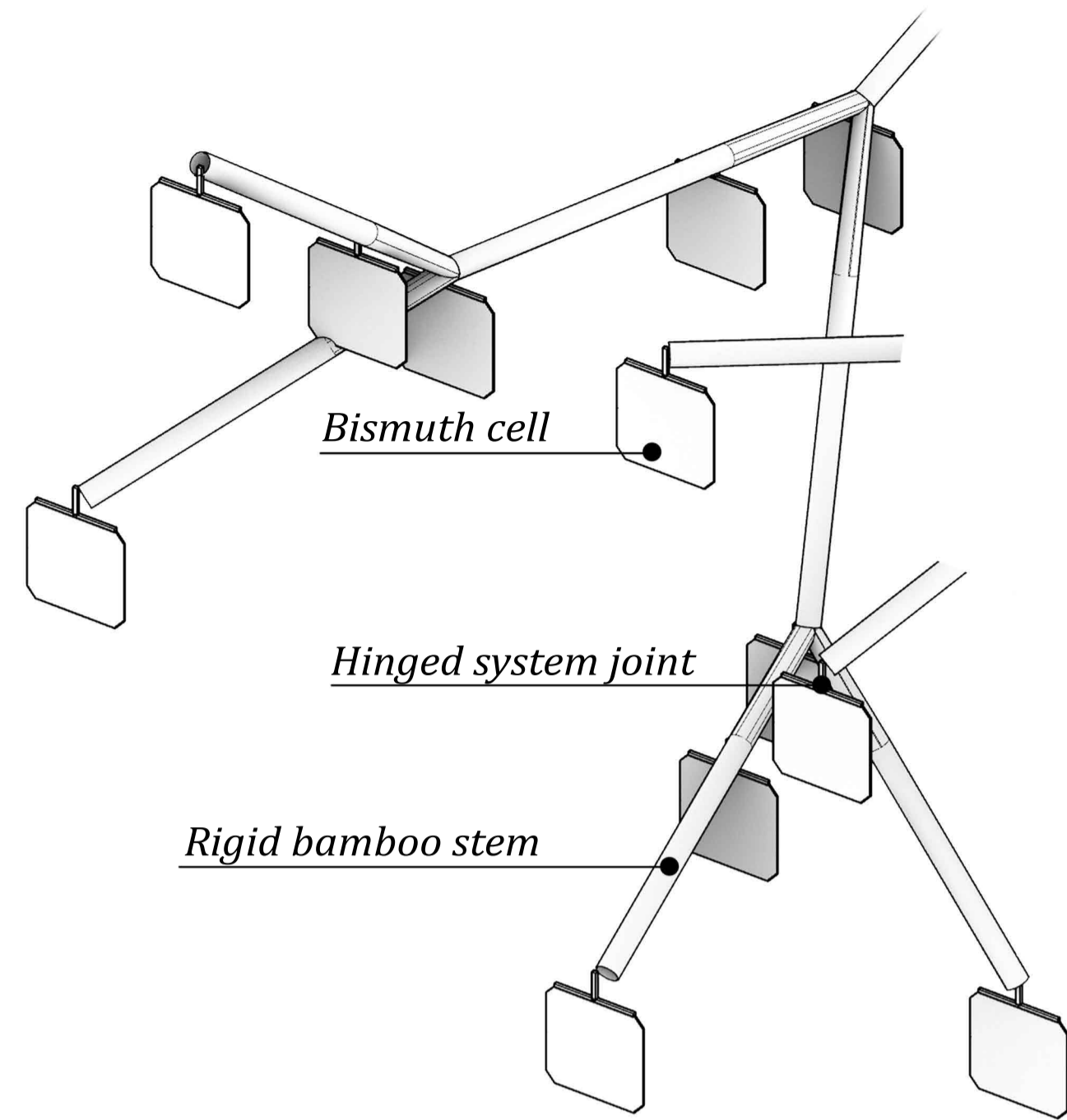


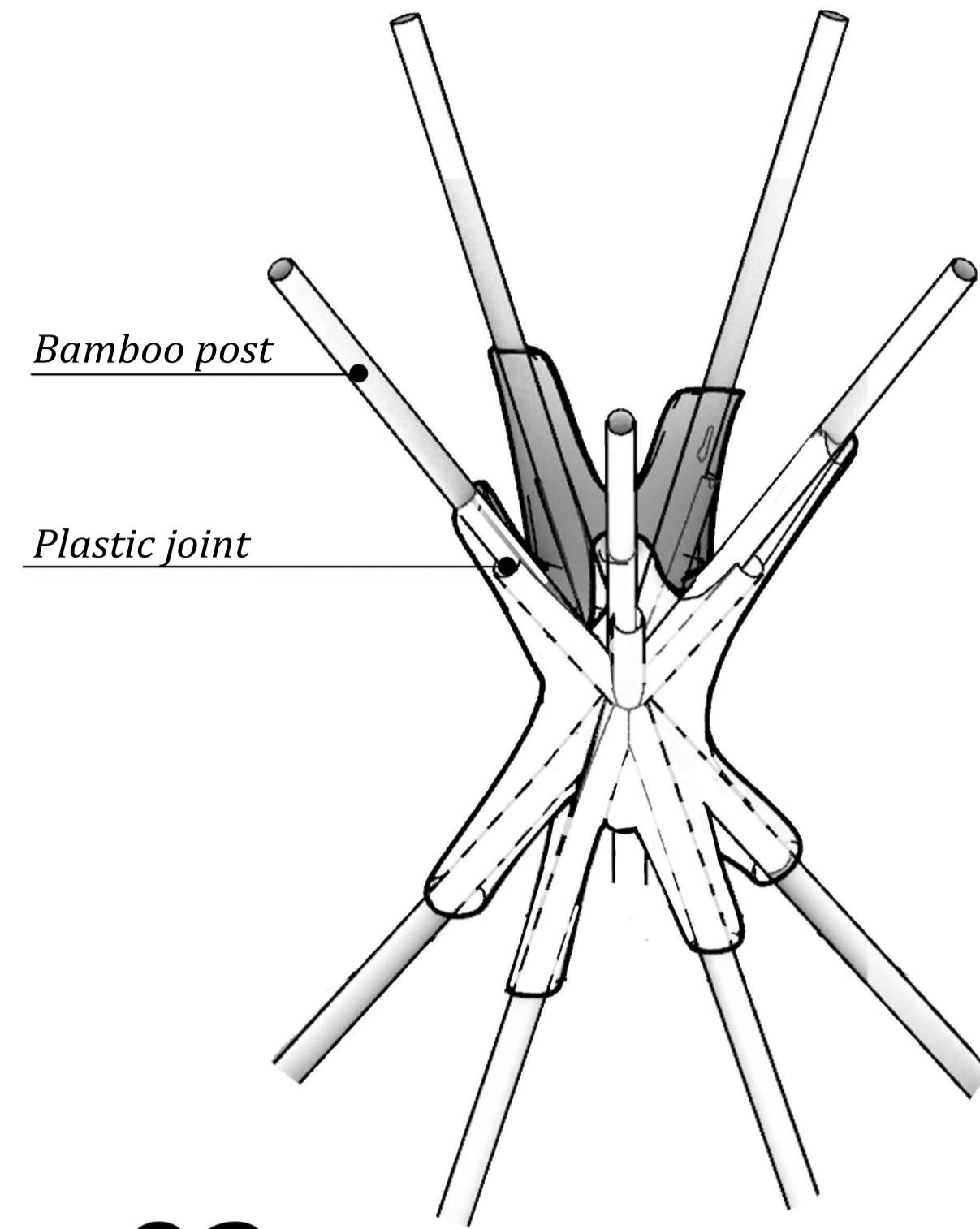
# BAU(M) The fractal tree



**01**

## Solar panels

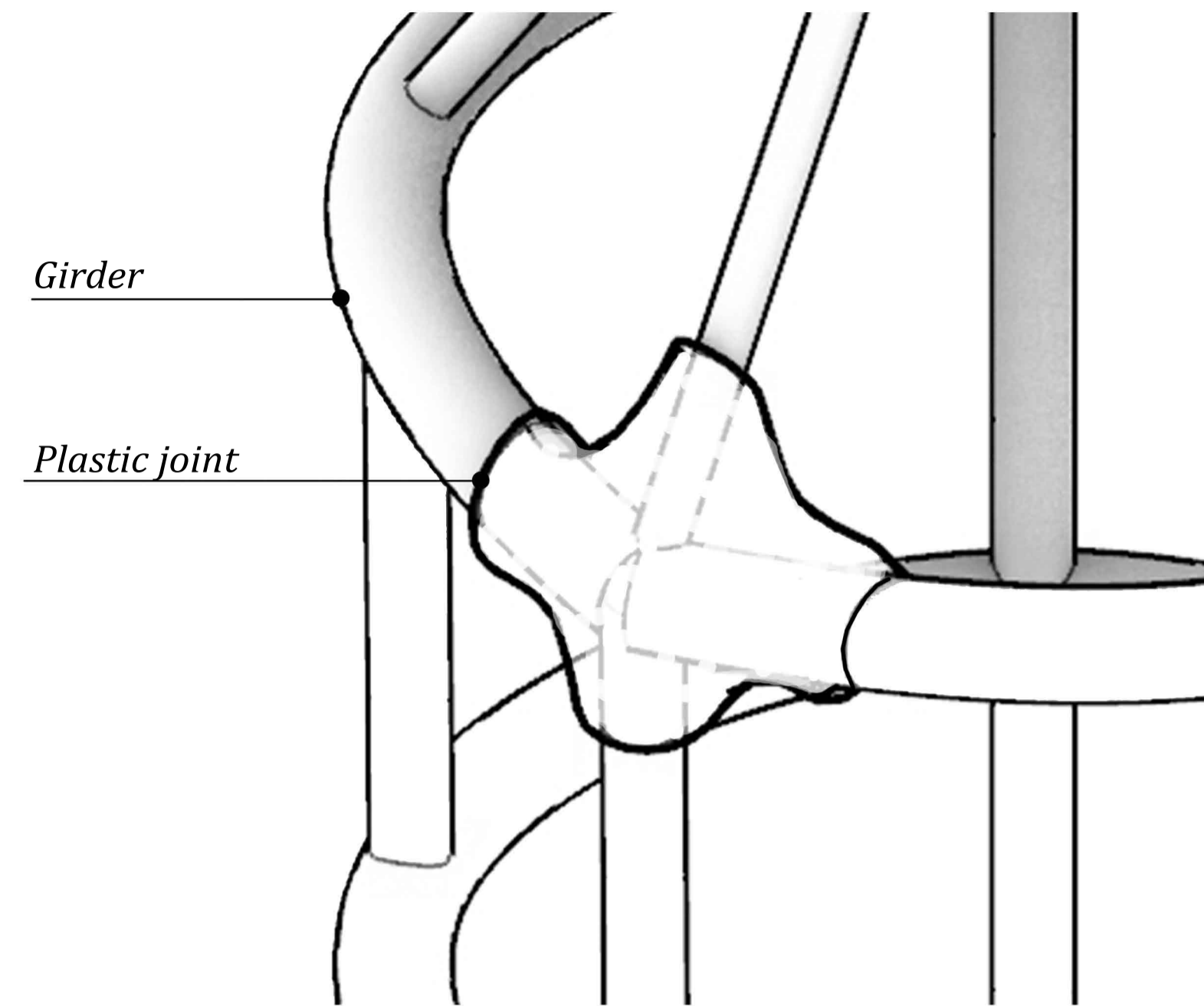
Single- connected bismuth nanocrystal ultra- thin PV cells characterise with great price - efficiency ratio. Mounted by hinged joints to rigid bamboo structure, equipped with sun rays- tracing system, provides endless possibility of customization regarding density of use, size, assigned dimension and tree trunk volume when the size matters, especially in urban tissue. Moving on wind resemble leaves, creates effect of human familiar natural feeling. Profitability starts from 100 cells, easily to obtain within a single BAU(M) tree.



**02**

## Main joint and vertical structure

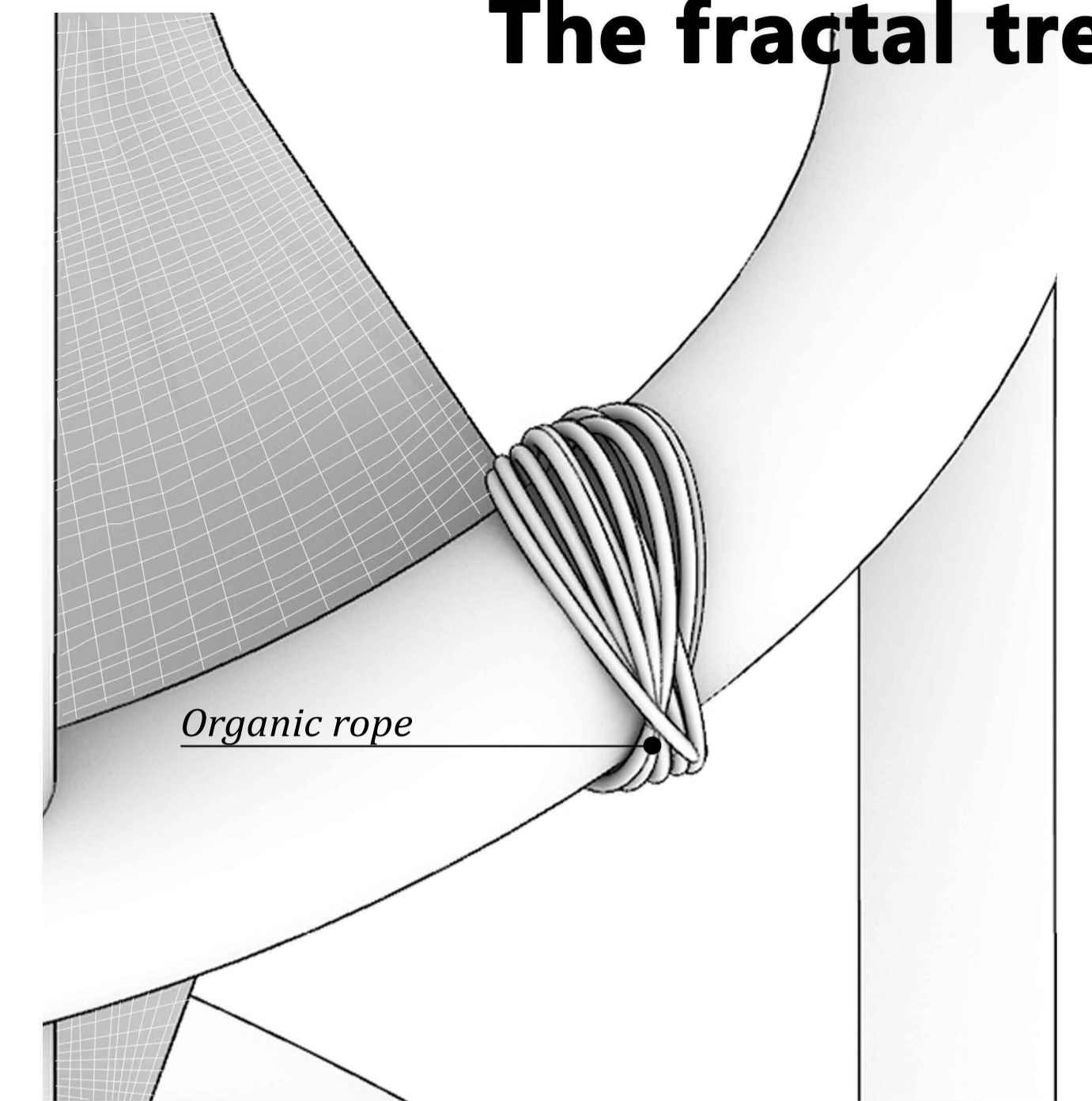
Main joint created with special high- rigidity recycled plastic connects tree trunk and main structure. Depending on height, volume and other sizes of the tree, the number of posts is to be counted. In biggest kinds of trees should be additionally glued to the frame. Section of each bamboo element depends on the loads the vertical structure bears and can be stiffed laterally when needed.



**03**

## Static plastic joints and horizontal structure

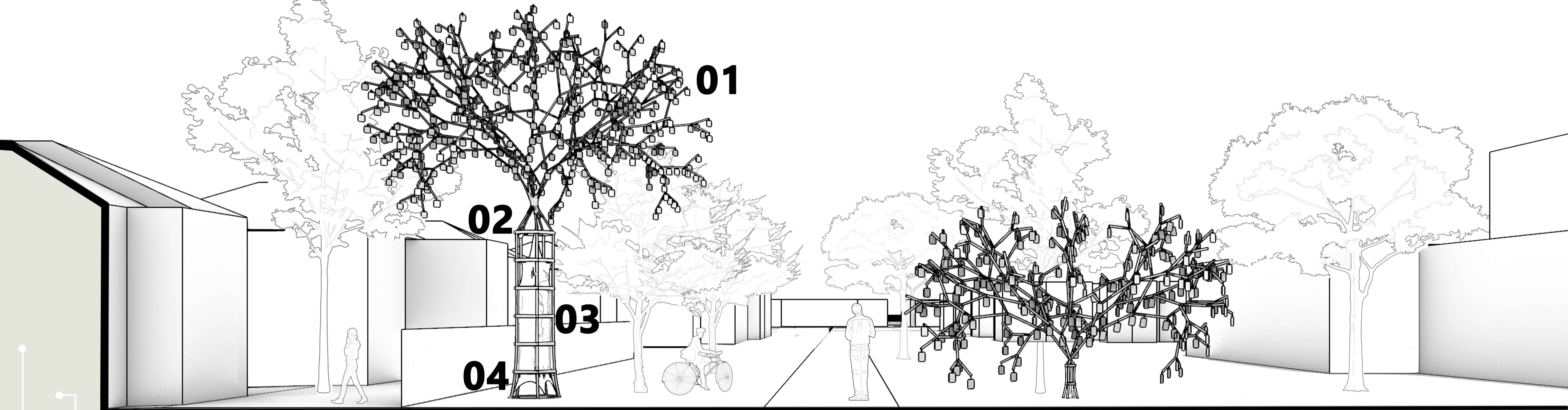
These rigid connectors are made of recycled plastic, specifically 3D printed and mounted accordingly to assigned horizontal girders, lintels and vertical post, creating stiff structure. Due to its structural nature, should be counted by programme. Bamboo posts characterize with great possibility of bending and are widely used all around the world. Although it seems like there is no better material for the structure than bamboo, BAU(M) can be produced of recycled plastic or 3D printed as well.



**04**

## Water catcher and rope montage

This structure is the easiest to assemble. Polyester mesh, spanned among posts can be mounted directly to the frame by organic rope. This structure does not load any bearings, therefore depending on the size of tree, can be mounted or not. The advantages of solution can be seen in the inner city urban tissue and parks, since increasing temperatures creates heat island and leading water to the cities is one of the greatest solutions!



**05**

## Underground system

The system connecting each tree battery with another lies shallowly, therefore does not harm existing forest or park root system and can be implemented on dense wooded area. Each tree consist of foundation- like battery encased with additional waterproofed-bamboo foundation piles when needed. One battery sends surplus energy to another not- fulfilled battery or one main transformer station, then directed to houses or public use. Private owners sends created energy to the same transformer station, and their energy costs decreases accordingly.