

“双碳”背景下
“太太客厅”文化社交空间环境设施设计

**Design of Social Space Environment and Facilities
for "Mrs. Living Room" in the Context of Double Carbon**

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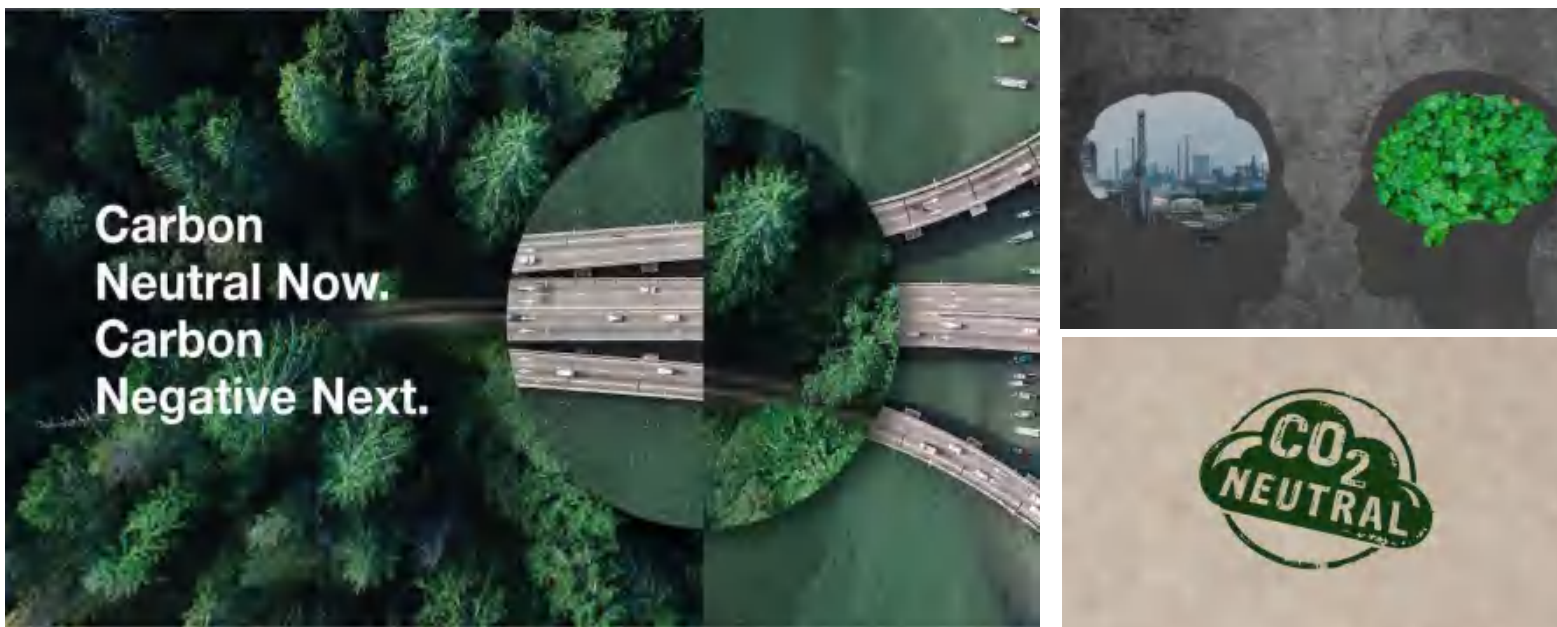
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设计背景

Design background



1.1设计背景：“双碳”背景分析 Dual carbon background analysis



为实现人类社会行为与自然环境的协同发展，中国在2020年9月明确提出了“碳达峰、碳中和”的“双碳”目标倡导，并提出了我国的“双碳”目标，即力争在2030年将CO₂排放量达到峰值，并在2060年实现社会环境的碳中和，提出“双碳”目标是中国对全世界做出的重大贡献。

In order to realize the coordinated development of human social behavior and natural environment, China put forward the "double break" goal of "carbon peaking and carbon neutrality" in September 2020, and put forward the "double carbon" goal of striving to peak CO₂ emissions by 2030 and achieve carbon neutrality in social environment by 2060. This is a major contribution China has made to the world.

1.2设计背景：生物质能 What is biomass energy

根据本次设计定位特点，将利用**生物质能发电**进行环境设施的设计。

According to the design positioning characteristics, the use of biomass power generation for the design of environmental facilities.

生物质能指利用自然界植物、粪便以及城乡有机废物转化成的能源。动物、植物、微生物及这些生物产生的有机排泄物和代谢物统称为生物质。

Biomass energy refers to the use of natural plants, manure and urban and rural organic waste into energy. Animals, plants, microorganisms and organic excrement and metabolites produced by these organisms are collectively referred to as biomaterials.

生物质能发电的**优点**：1、受自然条件限制小，可靠性高，持续性好；2、工程处投资小，有利于产业化、规模化；3、资源丰富，资源总量不低于30亿吨干物质；4、成本较低，在有国家对生物质发电补贴的情况下，生物质发电的投资回收得到较好的保证。

Advantages of biomass power generation: small restriction by natural conditions, high reliability and good continuity; The Agency's small investment is beneficial to industrialization and scale; Rich in resources, with the total amount of resources not less than 3 billion tons of dry matter and so on.



设计主题

Design theme



2.1设计主题：什么是“太太客厅” Design theme: What is Mrs. Living Room



- "太太客厅"是上世纪20年代末到30年代初的一个文化沙龙，地点在梁思成林徽因住家的北京东总布胡同三号。
- 院内往来皆鸿儒，沈从文、卞之琳、萧乾、胡适、金岳霖、朱光潜、费正清等作家、学者都曾在此相聚一堂，因其名声远扬而被称为"太太客厅"。

"Wife's Living Room" was a cultural salon from the late 1920s to the early 1930s, located in Liang Sicheng Lin Huiyin's residence at No. 3 Dongzong Bu Hutong, Beijing. Number three.

2.2设计主题：林徽因与“太太客厅” Lin Huiyin and wife's living room



- 1930年代的北平知识分子将**客厅**作为一个断的栖身空间，而这个空间对林徽因这样的**知识女性**而言意义重大。
- 林徽因是20世纪中国知名的诗人、建筑学家、小说家，同时，她还是著名的**"太太客厅"**的**女主人**。
- 太太客厅对于林徽因**性别主体生命历程**有深层意义，现代客厅文化对**女性主体成长**的意义也不容小视。
- In the 1930s, intellectuals in Peiping regarded the living room as a broken living space, which was of great significance to Lin Huiyin's intellectual nature.
- Lin Huiyin was a famous Chinese poet, architect and novelist in the 20th century. She was also the mistress of the famous "Lady's Living Room".
- The living room of the wife has deep significance to the life course of Lin Huiyin's gender subject, and the significance of modern living room culture to the growth of the female subject cannot be underestimated.



主题定位

- 以太太客厅为主题

Topic Positioning

The wife's living room as the theme



目标定位

- 打造新型文化社交空间
- 展现当今时代女性力量和女性主义文化

The Target

We will create new cultural and social Spaces.
To show the power of women and feminist culture in today's era.



使用人群定位

- 知识分子、建筑师群体
- 有家庭的女性群体
- 青年女性群体

Using Crowd Positioning

Intellectuals and architects.
A literary group with a family.
Young women group

设计构思

Design concept



3.1设计选址 Design Site Selection



选址原因：

- 北总布胡同三号“维修性拆除”
- 林徽因出生于浙江杭州
- 历史文化名城，文化气息浓厚

Reason for site selection:.

- North general Buhu Bureau No. 3 "male revision of the fold."
- Lin Huiyin was born in Xinjiang Hangzhou.
- Famous historical and cultural city, rich cultural atmosphere

设计选址：杭州市西湖区兰心驿站

占地面积约400m²，二层建筑

Design Location: Lanxin Post Station, Xihu District, Hangzhou covers an area of about 400m² with a two-story building

3.1 设计选址 Design Site Selection



区位分析

Location analysis



周边道路及主入口分析

Surrounding roads and main entrance analysis



视线分析

Sight analysis.

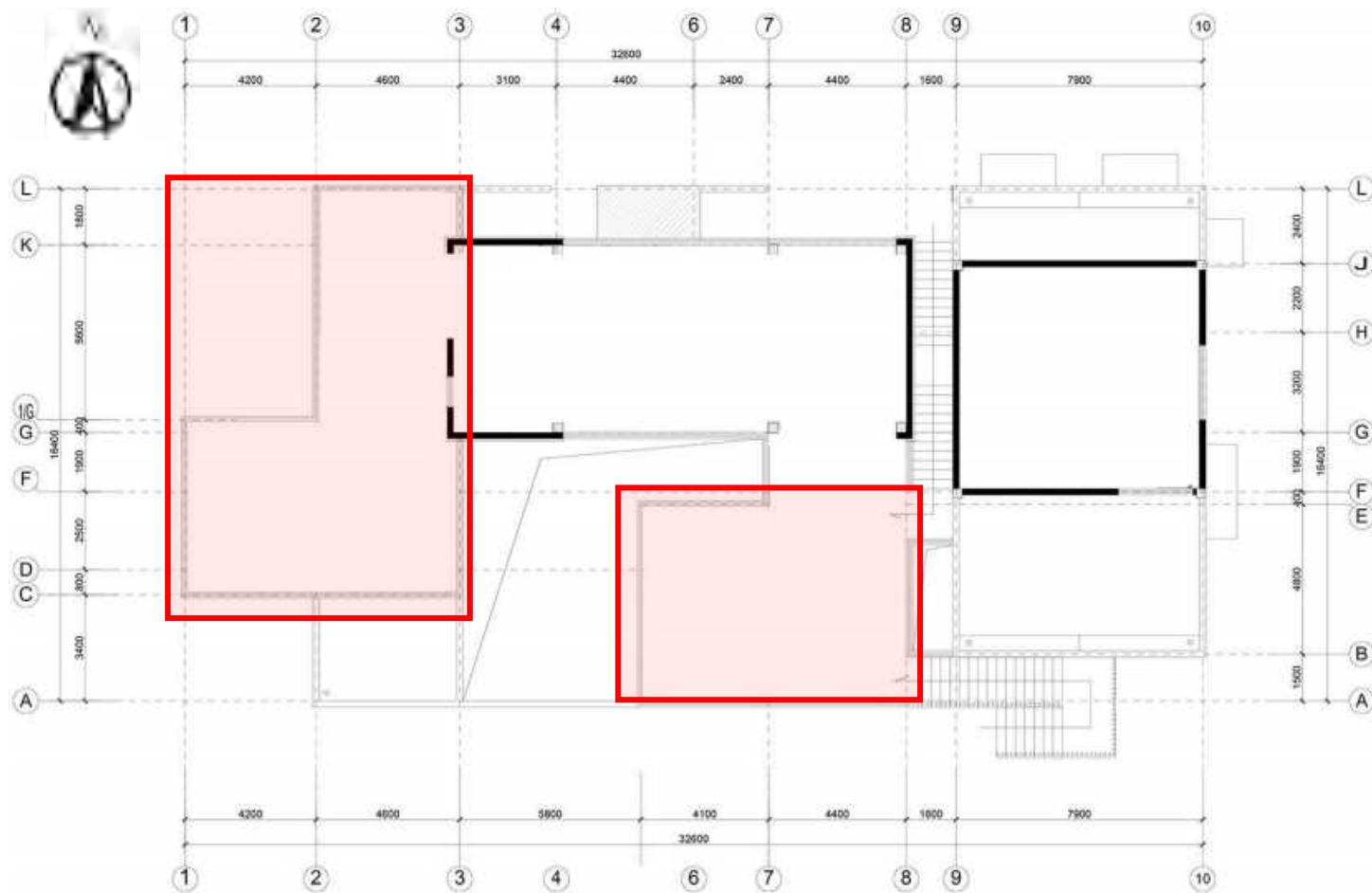
- 环境清幽，自然景观优美
- 旅游景点环绕
- 人流量大

- The environment is quiet and beautiful.
- Surrounded by tourist attractions.
- Large flow of people.

- 公共设施完善
- 可达性强
- 视线通达

- Perfect public facilities.
- Strong reachability.
- Visual accessibility.

3.2 场地分析 Site Analysis



- 设施将应用于场地二层庭院，庭院面积约 $140m^2$ 。
- 环境安静，光线条件较好，视线开阔，通过植物搭配，能够形成较好的社交和休闲氛围。

二楼原始结构图

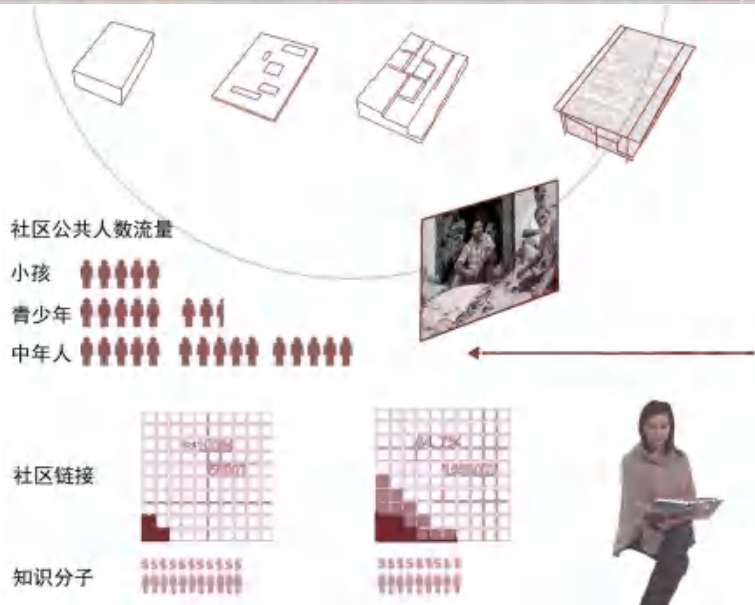
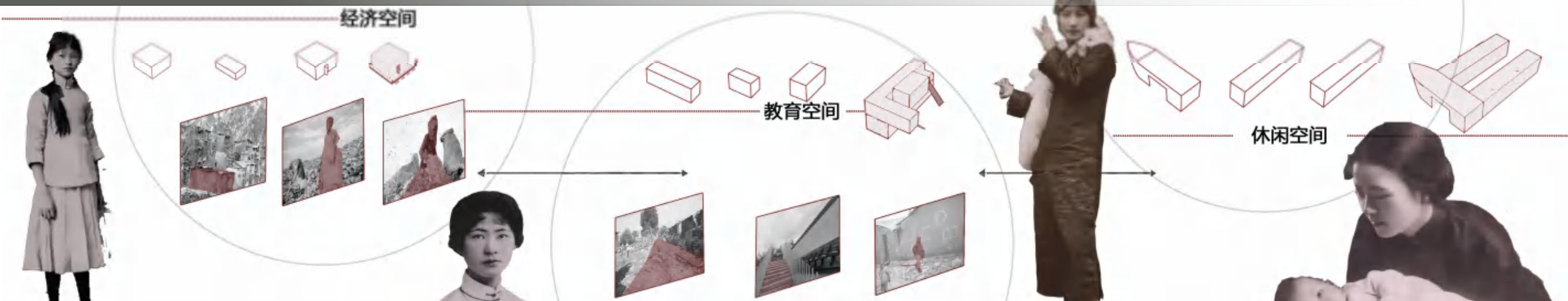
$350m^2$ Original structural drawing of the 2nd floor



The facility will be used in the second floor courtyard of the site, with an area of about $140m^2$.

The environment is quiet, the light condition is good, the sight is noisy, through the plant Cupping, can form a better social and physical leisure most circumference.

3.3 目标人群分析 Target group analysis

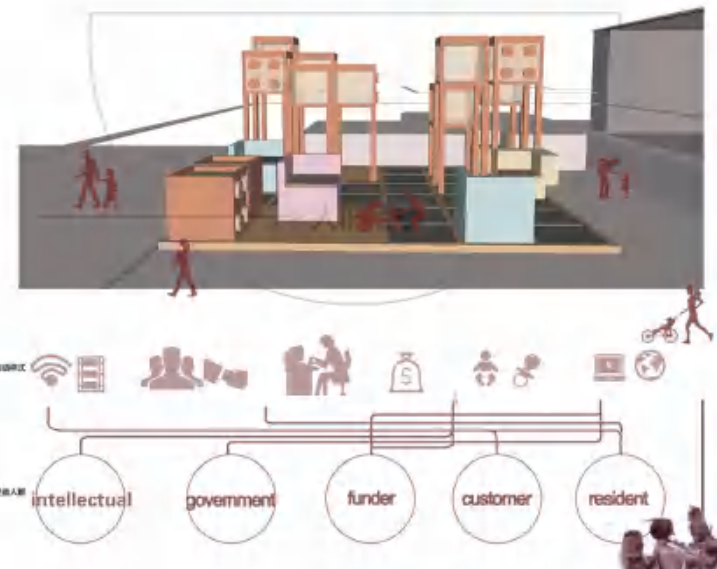


人群组成

年龄分段



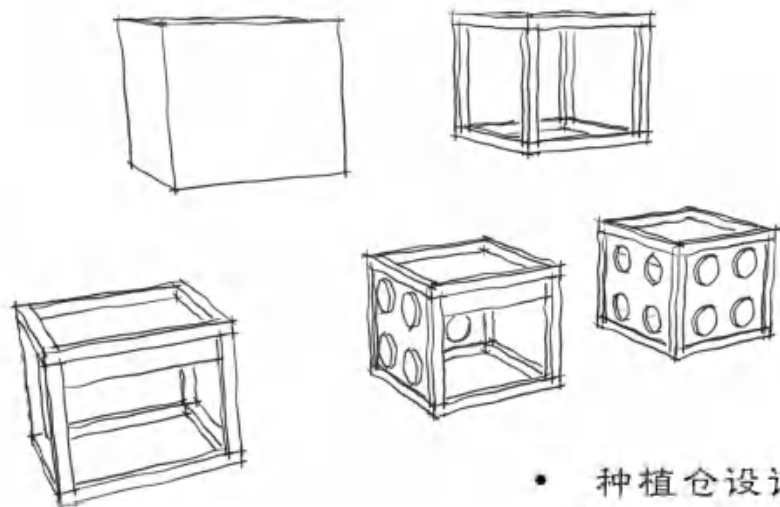
人群结构



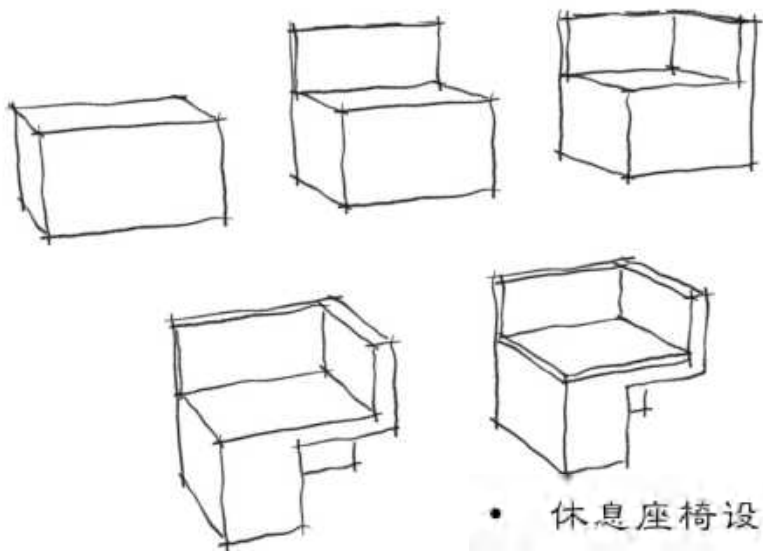
具体化设计 Concrete design



4.1 设计生成 Design generation



• 种植仓设计演变
The design of the plant warehouse



• 休息座椅设计演变
The design of the seat

以木构架搭建**植物种植仓**，同时结合**积木**的拼接方式，形成**模块化装置**，实现相互拼接组合成不同形式。

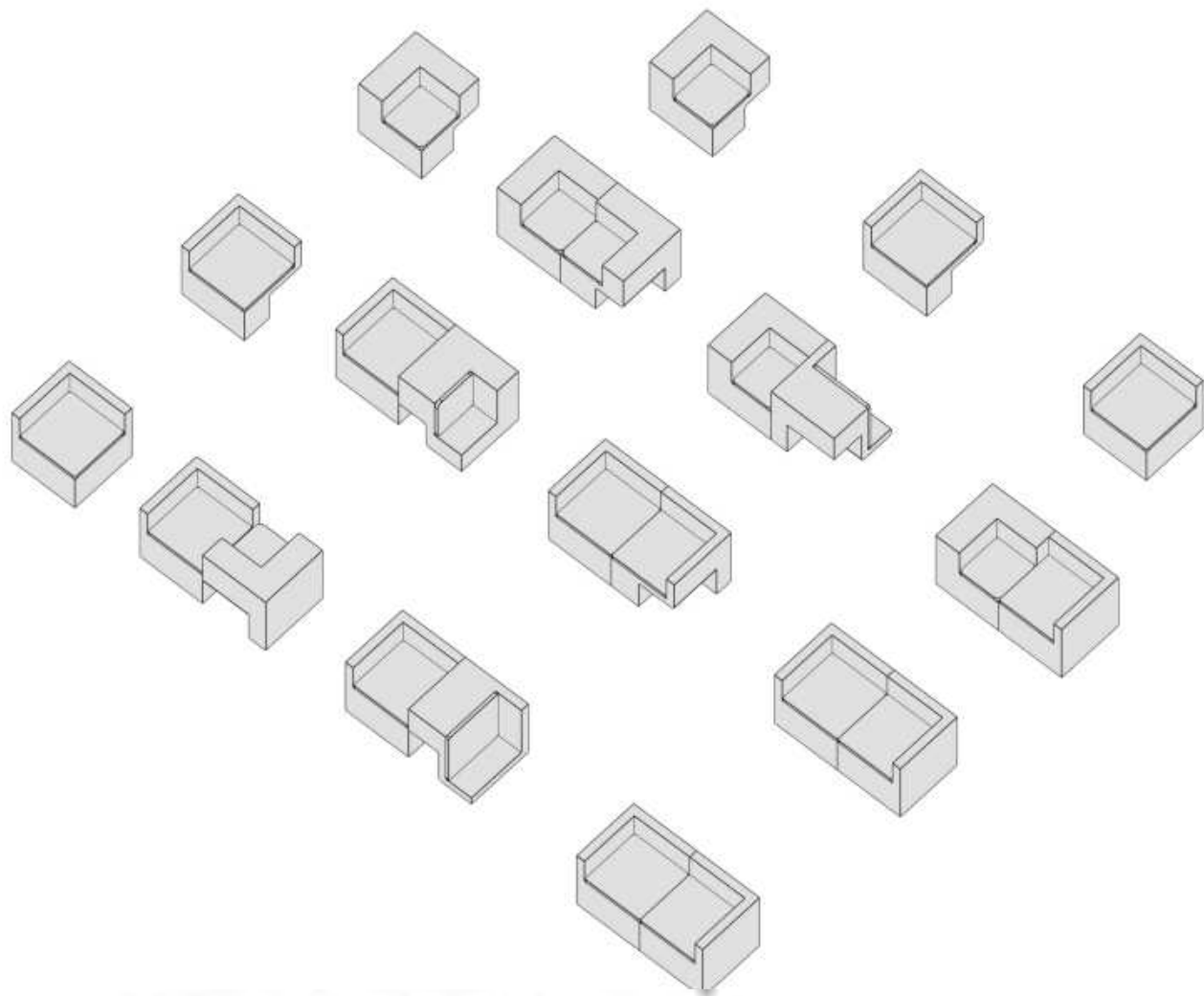
使用带有**导电丝**的薄纱层，将灯带组成时钟加入其中，营造安静、休闲、自然的氛围。

The wood frame is used to build the plant warehouse, and the modular device is formed by combining the splicing way of building blocks to achieve different forms of splicing and combining. Using a layer of tulle with conductive silk, add a light strip to form a clock to create a quiet, casual, self-heating atmosphere.

对体块进行**分割**形成不同的座椅形式。座椅之间能够相互拼接、组合，形成**模块化设施**，适应不同规模的社交环境。

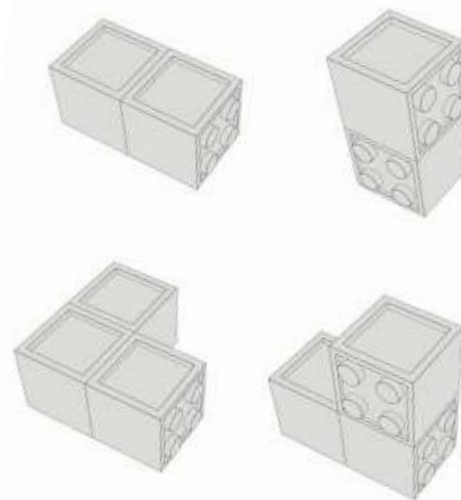
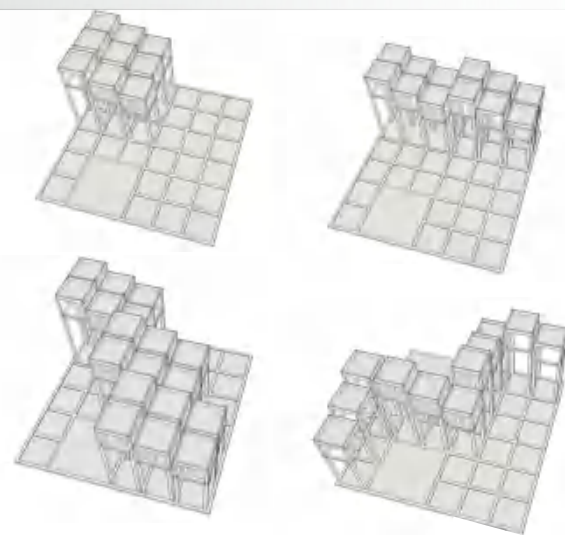
to divide the volume into different seating forms. The seats are strong enough to splicing and combining with each other to form modular facilities, suitable for the size of the social environment.

4.1 设计生成 Design generation



- 不同的座椅组合方式

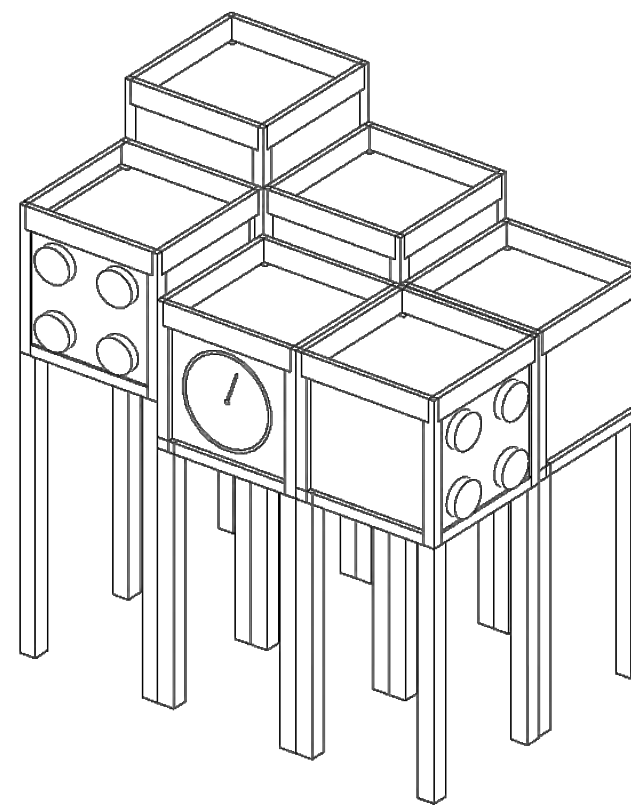
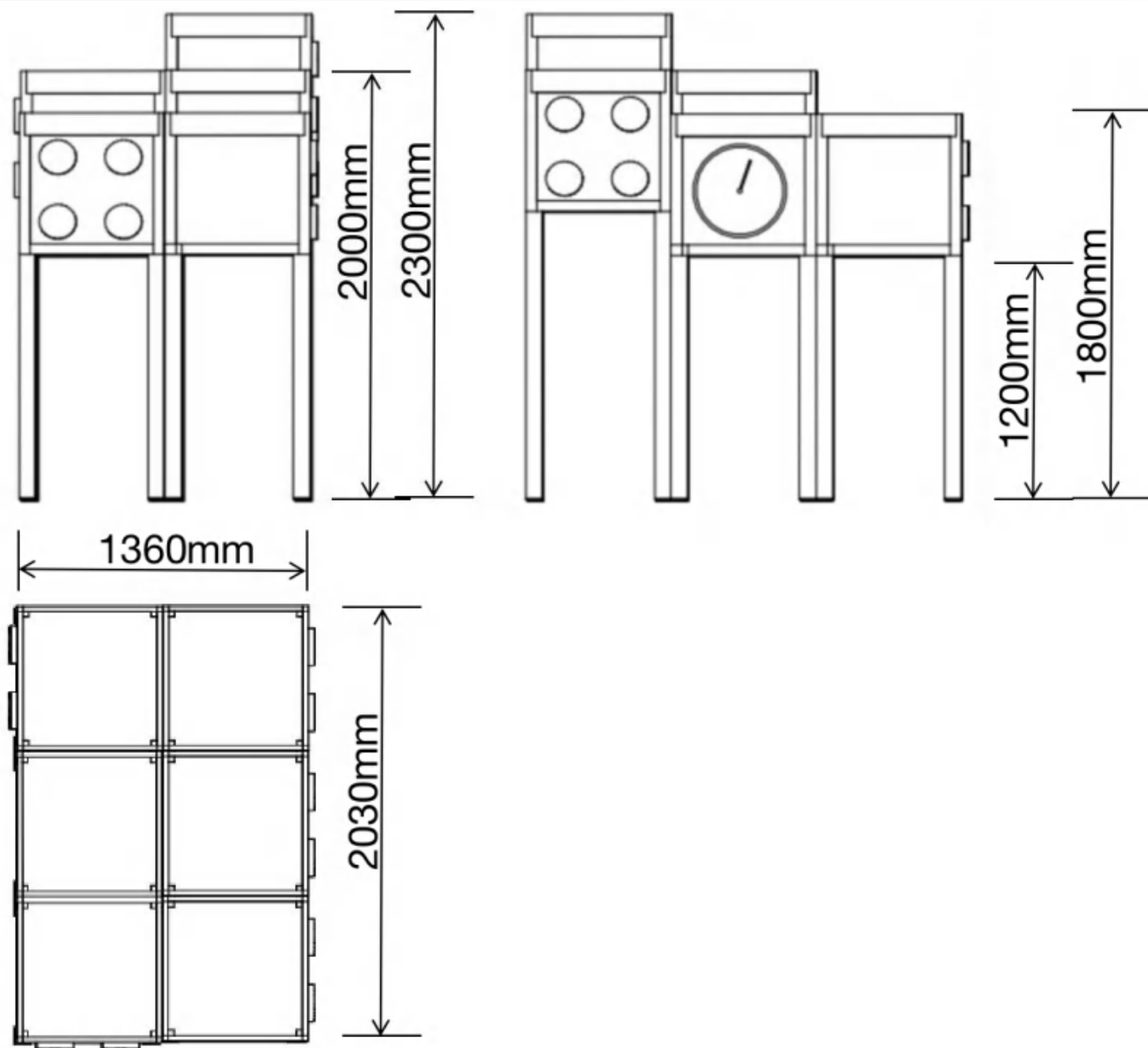
Different seating combinations



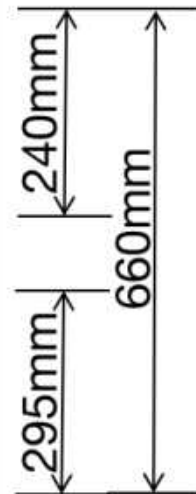
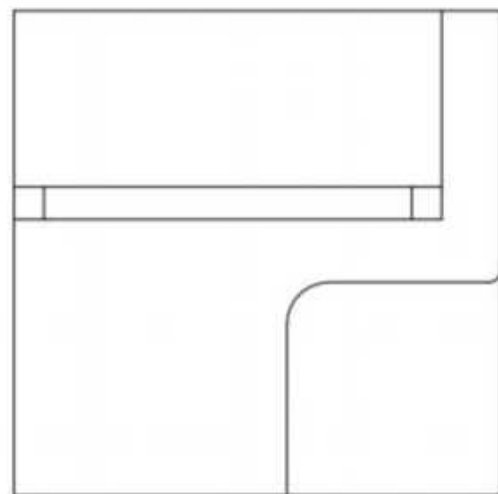
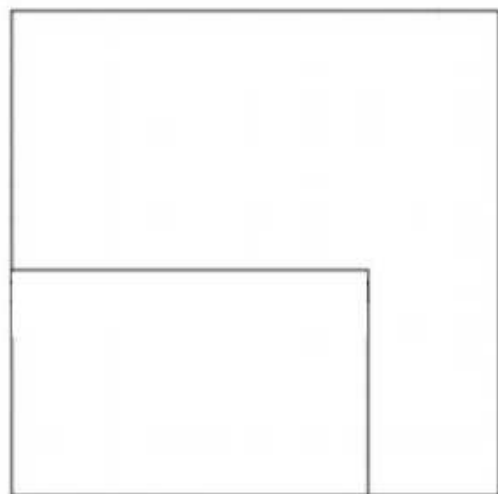
- 不同的种植仓组合方式

Different combinations of plant warehouse

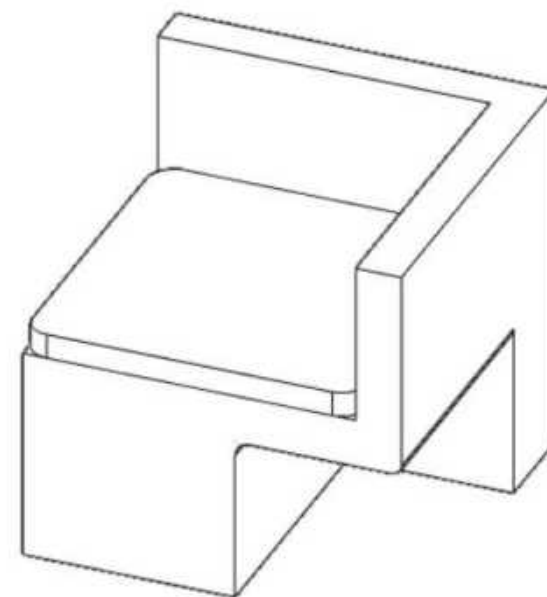
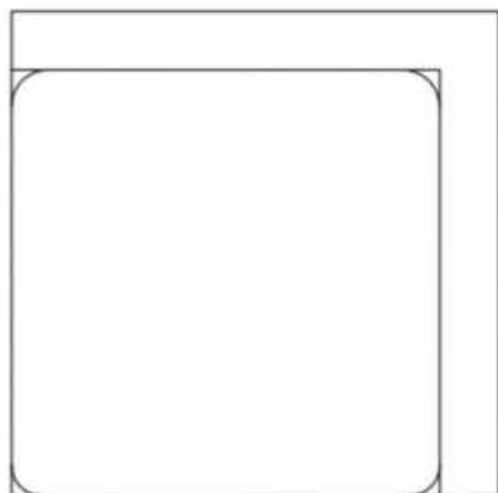
4.2 三视图分析 Three view analysis



4.2 三视图分析 Three view analysis



80mm

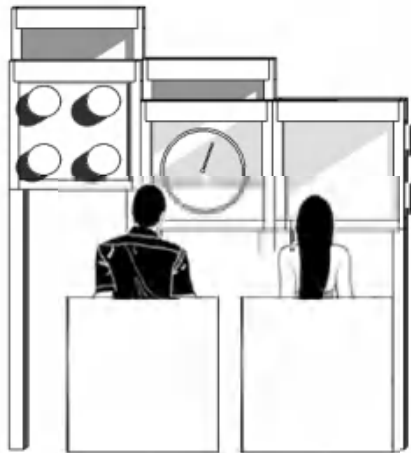


4.3 使用功能分析 Analysis of usage functions



- 围坐交谈

Sit around and talk



- 面对面交谈

Face-to-face conversation



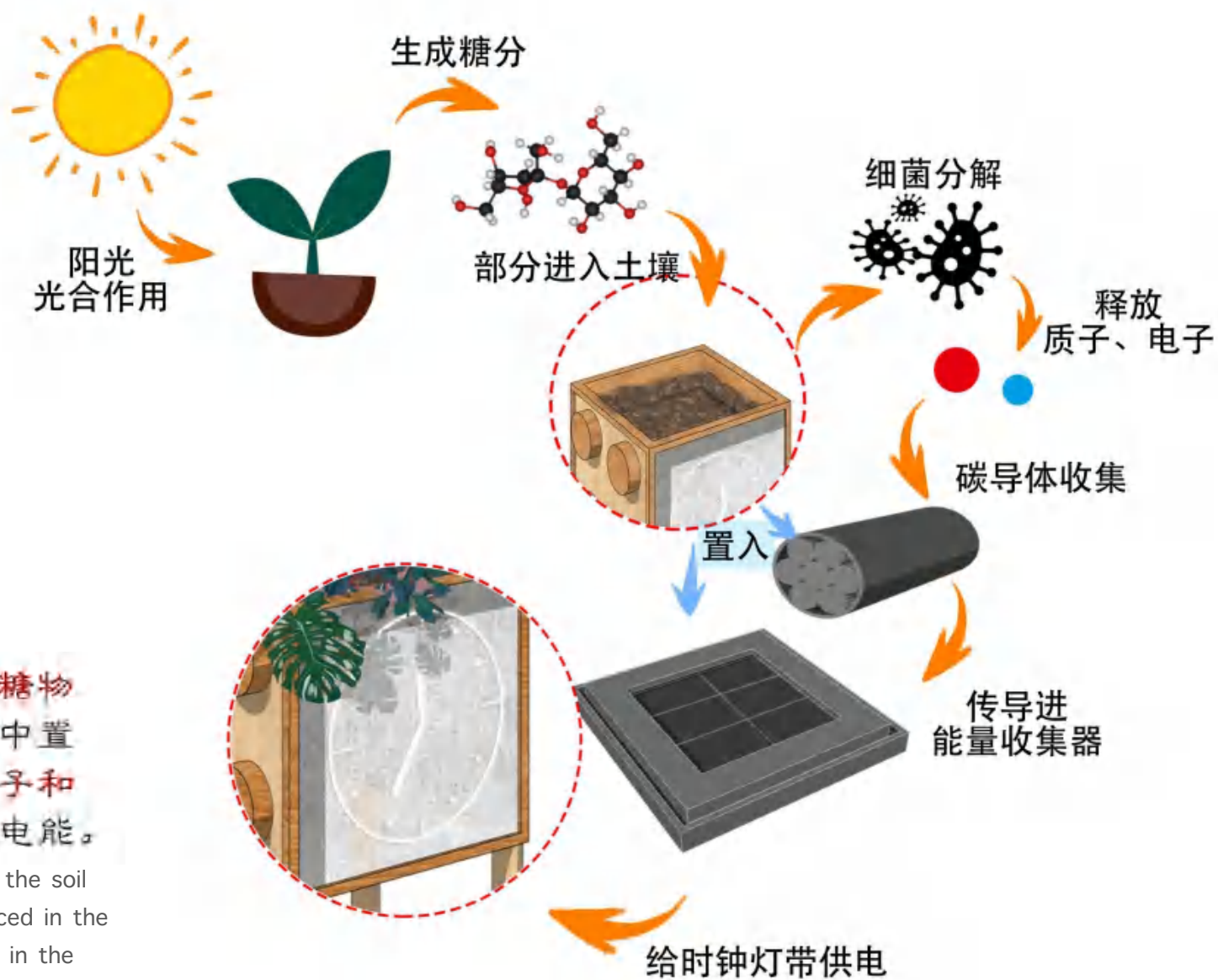
- 休息玩耍依靠

Rest and play depend on free facilities

设施自由灵活，根据不同社交场合元素，会面点和谈话空间，按照人们使用需求进行围坐、距离感的组合，呈现城市多元社交方式，让这片公共空间变得灵活，充满生气。

According to different elements of social occasions, meeting points and conversation Spaces, the combination of surrounding and sense of distance is made according to people's use needs, presenting multiple social ways in the city, making this public space flexible and full of vitality.

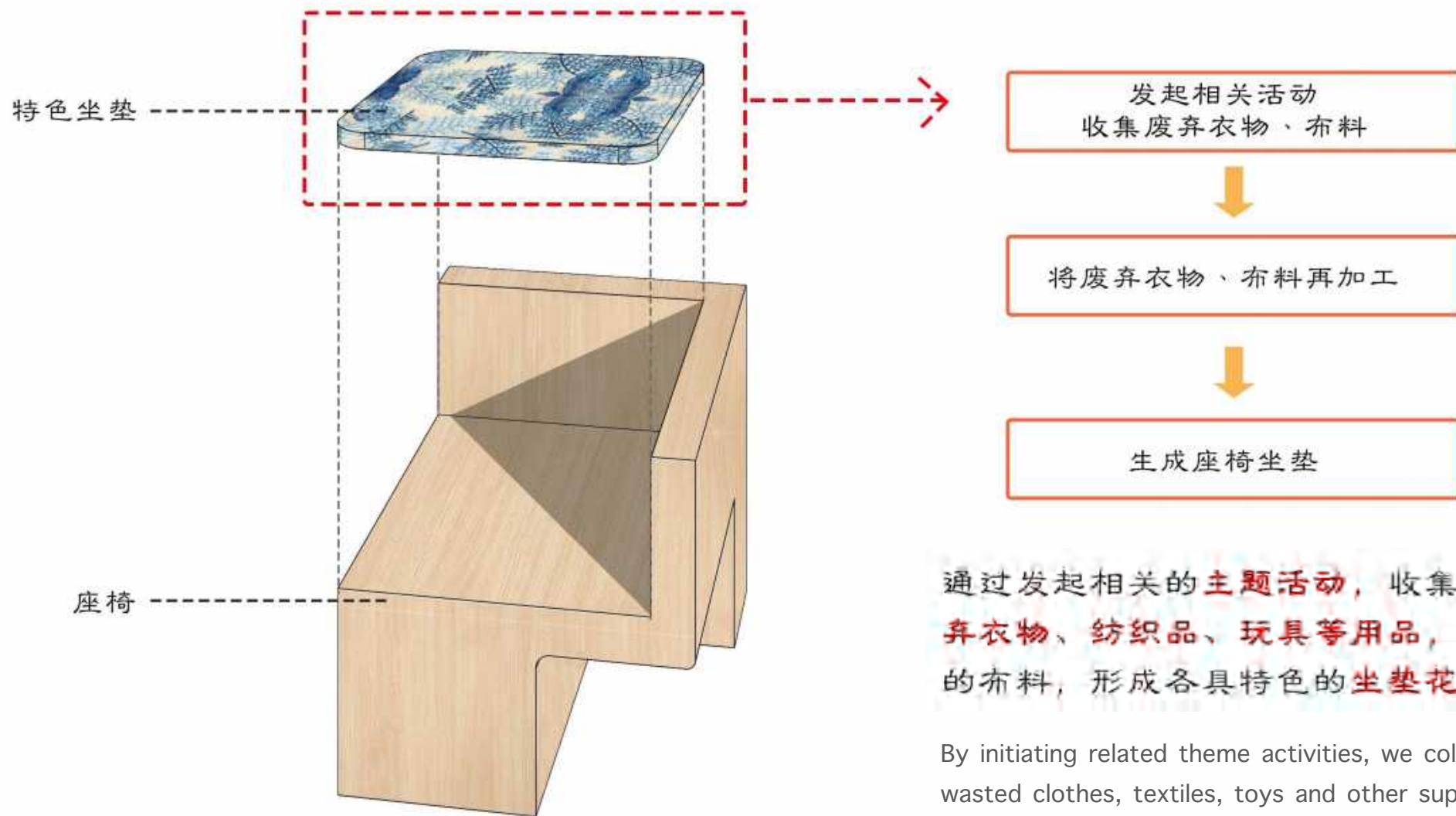
4.4 轴测图分析 Axonometric analysis



利用植物光合作用产生并进入土壤的部分糖物质，通过土壤中的细菌将其分解，在土壤中置入碳导体，吸收细菌分解糖物质释放的质子和电子，随后传导进能量收集器中，转化为电能。

Part of the sugar produced by plant photosynthesis and entering the soil is decomposed by bacteria in the soil. Carbon conductors are placed in the soil to absorb the protons and electrons released by the bacteria in the decomposition of the sugar, which are then transmitted to the energy collector and converted into electric energy.

4.4 轴测图分析 Axonometric analysis



By initiating related theme activities, we collect people's wasted clothes, textiles, toys and other supplies, extract the cloth, and form distinctive cushion patterns.

4.5 效果图 Renderings



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4.5 效果图 Renderings



A misty forest scene with tall, thin trees and a ground covered in vibrant green moss. A dark grey horizontal banner is overlaid across the middle of the image, containing the word "THANKS." in a bold, white, sans-serif font. The background is a soft-focus forest with a light mist or fog, creating a serene and atmospheric setting.

THANKS.