



# Shougang - Feel Your Future

## INTRODUCTION

Shougang-Feel Your Future (FYF) is a comprehensive design proposal for the transformation of one of the four former blast furnaces in the Shougang Park located in the west of Beijing, combining the revitalization of a site with outstanding historic value whilst carefully embracing its historical heritage, focusing on the current needs of the people and guiding Shougang into a green and progressive future.

Besides representing a state-of-the-art environmentally friendly landmark, both its inside and outside space will function as a high-performing interactive exhibition centre, making thorough use

of advanced technological possibilities whilst excitingly playing with the senses of the visitors. What else could impress more than a real perception of how the future will be like?

This being said, Shougang FYF is not only a site with a stunning entertainment character, but a place of profound education and conceptual depth, a site which is meant to make visitors realize, move, re-consider, even shock! All these elements will be cautiously connected and expressed through the language of fine arts, thus making the visitor of the exhibition centre enter a poetic, multi-layered and remarkable cosmos: an unforgettable experience which people can take home and share with their beloved ones.

## SHOUGANG PARK: A DIALOGUE BETWEEN TIME AND SPACE

Shougang Park - 100 years ago a prouful symbol of industrial and economic progressiveness, backbone of the Chinese steel production and employer for tens of thousands of workers - has long been realized to be one of the main polluters of the area, which led to the gradual shutdown of the steel industry in the park beginning in 2005.

This decision is the ground-breaking to start something entirely new and progressive whilst valuing the cultural heritage the site exhibits. Shougang area aims at developing "into an exemplary zone for upgrading and transforming the traditional industries into green ones". It targets at striking a balance between residential and industrial purposes as well as a multi-functional cityscape that offers a great opportunity to serve as a testing campus for high-tech solutions in the fields of digital intelligence, cultural innovation and sports.

“首钢——感受你的未来”是一项综合设计计划。方案基地位于北京西部的首钢公园。在改造旧高炉中选取了其中一座作改造设计。方案将场地复兴与其突出的历史价值相结合，精心处理历史遗产。重点关注人民的当下需求，引领首钢迈向绿色、进取的未来。该方案将成为最先进的环境友好地标建筑。其内升空间则是高性的互动展览中心。供游客使用。充分利用先进技术的可能性，激发人们的不屑感受。对比对未来的真实感知，还有什么能更令人印象深刻呢？“首钢——感受你的未来”不仅仅提供叹为观止的娱乐体验，更是富含教育意义和概念深度的场所。旨在使参观者理解、感动、重新思考，乃至震撼内心！所有元素都将通过艺术语言谨慎仔细地联系在一起。为展览中心提供诗意的、多层次的非凡空间。参观者将多人其中获得难忘体验，并带它与家人分享。

Therefore, Shougang is enabling and facilitating a dialogue between time and space. Making decisions that will lead to a brighter future always requires learning from actions undertaken in the past, carefully reconsidering whether the actions taken led to the desired result and finally redefining the interventions to the challenges of the time. Shougang Park represents a unique stage in which both states - past and future - can visibly and conceptually interact with each other. The past is not over yet, whereas the future has already begun.



Figure 1 Shougang site in operation, 1972

“This place must represent the direction China is taking”

Lu Hux - assistant general manager, Shougang



Figure 2 Vision of Shougang site, CCNY Design

### WHY

- Industrialisation
- Economic growth
- A silent memorial for pollution, human resource and labor force

### SYMBOL

### NEW POLICY

- From "Made in China" to "Created in China"
- Industrialization 4.0
- Environment-friendly industry
- Globalisation
- High-tech

## SHOUGANG SITE PLAN



Figure 3 Site plan of Shougang western area, 30:100,000

## INTEGRATION OF THE SURROUNDING AREA



Figure 4 Integration of the surrounding area around Blast Furnace No. 1

## USE OF OUTSIDE SPACE

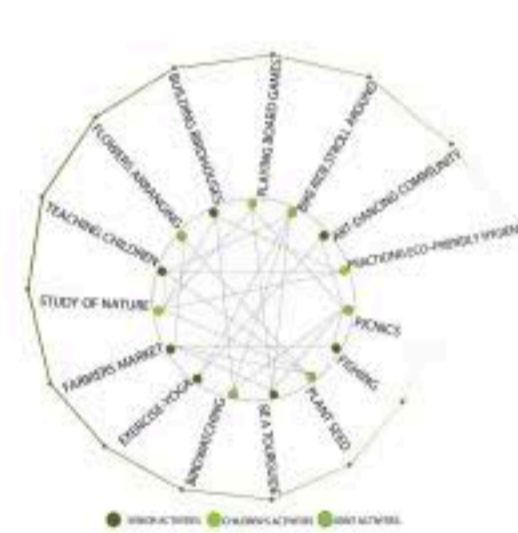


Figure 5 Integration of outside activities



Figure 6 Design principles of Shougang FYF

## PERSPECTIVE ON BLAST FURNACE NO. 1



Figure 7 Perspective view on Blast Furnace No. 1 with blue and grey water featured landscape

ACTIVITIES GROUP FESTIVAL	SPRING			SUMMER			AUTUMN			WINTER		
	Jan	Feb	Mar	April	May	Jun	July	Aug	Sep	Oct	Nov	Dec
Fullmoon festival												
Spring festival												
Education fairs												
Flower festival												
Concerts												
Firework display												
Winter festival												
Summer holidays												

Figure 8 Shougang FYF site location for celebration and festival

ACTIVITIES GROUP PHYSICAL ACTIVITIES	SPRING			SUMMER			AUTUMN			WINTER		
	Jan	Feb	Mar	April	May	Jun	July	Aug	Sep	Oct	Nov	Dec
Workshop												
Study - Wetland ecosystem												
Cycling, strolling around												
Visit the bird conservation site												
Camping - Picnic												
Ice-skee - Yoga - Dancing												
Plant seeds activities												
Team building												

Figure 9 Shougang FYF site plan for physical activities throughout the year

WHAT

- SHOUANG AMBITIONS**
- Heritage preservation
  - Multi-functional
  - Technology
  - Innovation
- Digital media
  - International
  - Micro tourism
  - Environmental quality



**SUSTAINABILITY AS A FOCUS**

- Need for action
- Solving mistakes of the past
- Contributing to the future
- Resilient scenarios



**EDUCATION**

- Education:**
- Raising awareness about environmental issues

- Entertainment:**
- Attracting people
  - Inviting them to interact

HOW

**SPREADING KNOWLEDGE**

- Creating a tangible, touching, motivating experience
- Workshops
- Virtual/Augmented Reality
- Digital playgrounds
- Contemporary art



**SHOUANG FEEL YOUR FUTURE: A DIALOGUE BETWEEN TIME AND SPACE**

Analog to the idea of the dialogue between time and space in Shougang Park, Blast Furnace No. 1 takes the idea of this dialogue further and adds more dimensions to it: Located in the impressive coliseum made from steel and concrete, a remarkable structure always reminding the guest of the past, the exhibition centre houses two closely connected exhibitions which allow the visitor to perceive, feel and interact with different climates (and futures) of our earth.

On the first floor, the visitor will be taken through the

climate zones and how they will change in a scenario in which humanity misses to take care about the earth, proceeding with "business-as-usual", which will be a both shocking and disturbing experience that will open the visitors' eyes and stick in their minds.

After undertaking a symbolic time travel to the next floor, the guests walk through the same climate zones, but this time perceive how they feel like in a scenario in which humanity took all the necessary steps to protect the environment and greatly limit the damage done to nature. On this floor, the audience is diving into a soft, gentle and placid natural beauty, thus

heavily contrasting the setting visited before. The concept of the exhibition centre is both simple and effective: Just by reading and being told how our world will change, only few people will start to think about changing their lifestyle.

However, if people can actually perceive the change that they are causing, the impact on their own decisions will be much bigger. In the exhibition centre, not only the high contrast between both possible futures is shown, but also will they be taught all the necessary steps that are required to reach the beautiful future in the form of interactive, fun and enlightening workshops they can participate in.

**THE CONCEPT**

Without any doubt, reaching a bright and green future can only be achieved through combining efforts, which explains the high importance of education and raising awareness about environmental issues in the first place. Nonetheless, education alone will not lead to the desired result: Creating a dry, monotonous museum in which people are taught what they believe they already know will miss the point of making people start to move. What is needed in this case is exciting and touching entertainment, facilitating emotions, showing something never shown before. By combining these two functions to a so called "edutainment", both an

in-depth concept that aims to serve a meaningful purpose can be combined with a site that attracts, stuns and interacts with people, it is so enjoyable that it makes them share their experiences on all kinds of social media, which in return attracts even more people and therefore also represents a well-functioning business model.

The comprehensive transformation of the blast furnace towards a circular, tangible environmental future hub goes well in line with the Chinese government's general goals on widely increasing the share of renewable energies while decreasing the nation's carbon footprint. Additionally, it will be of great symbolic character in the agenda from

"Made in China" to "Created in China" and can be the possibility for China to take the lead in tackling environmental affairs.

Due to its location, the history of the site and the future ambitions of both Shougang Park and the Chinese government, as well as its role in the Sino-German Innovation Partnership and the involvement of the centennial Bauhaus, Blast Furnace No. 1 is predestined to be an important driver in promoting the beginning of a new, clean and future generation-proof era.

Climate change is said to be the biggest challenge humanity was ever facing. Let's tackle it – together!

**ROOF CONSTRUCTION**

**Solar panels**

NEW STRUCTURE

**Glass**

NEW STRUCTURE

**Frame**

NEW STRUCTURE

**Steel beams**

OLD STRUCTURE

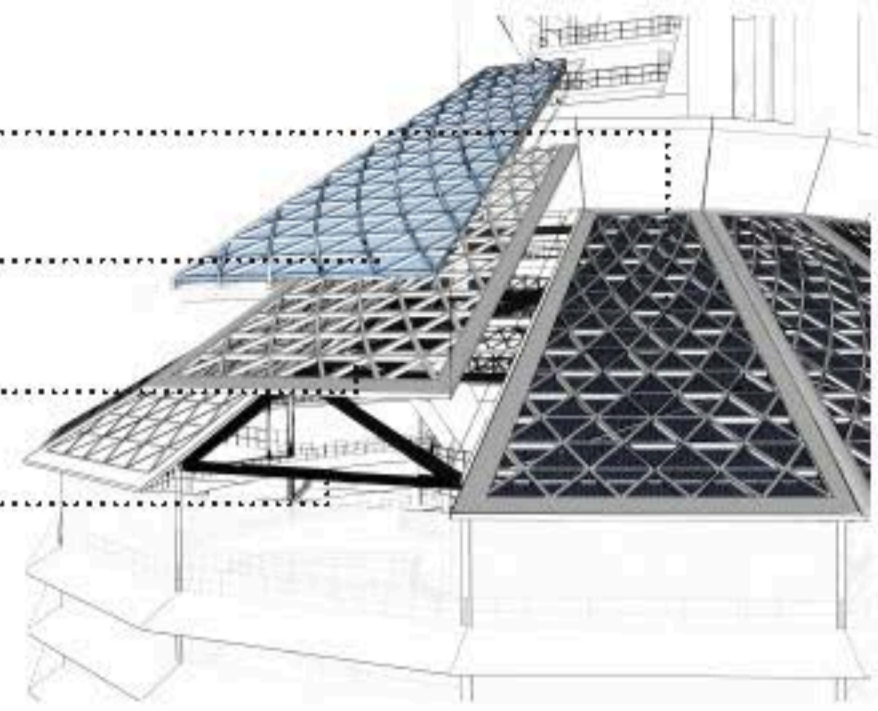


Figure 10) View of roof construction of the Blast furnace

**WATER MANAGEMENT**

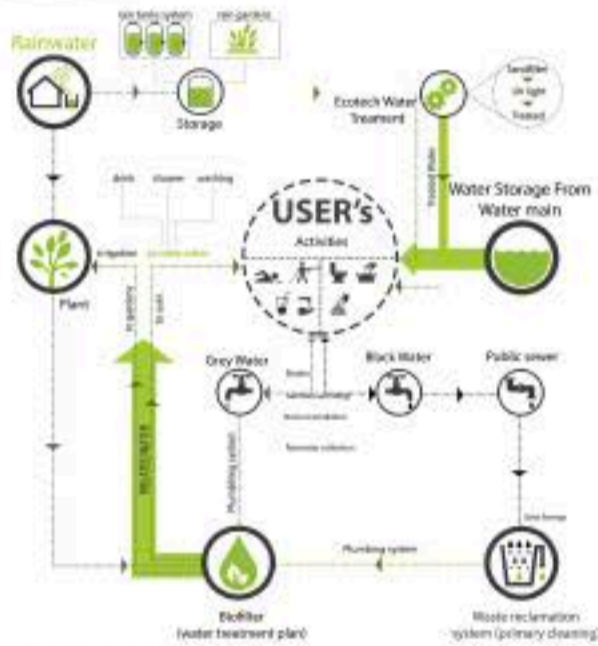


Figure 11) Scheme of the water management

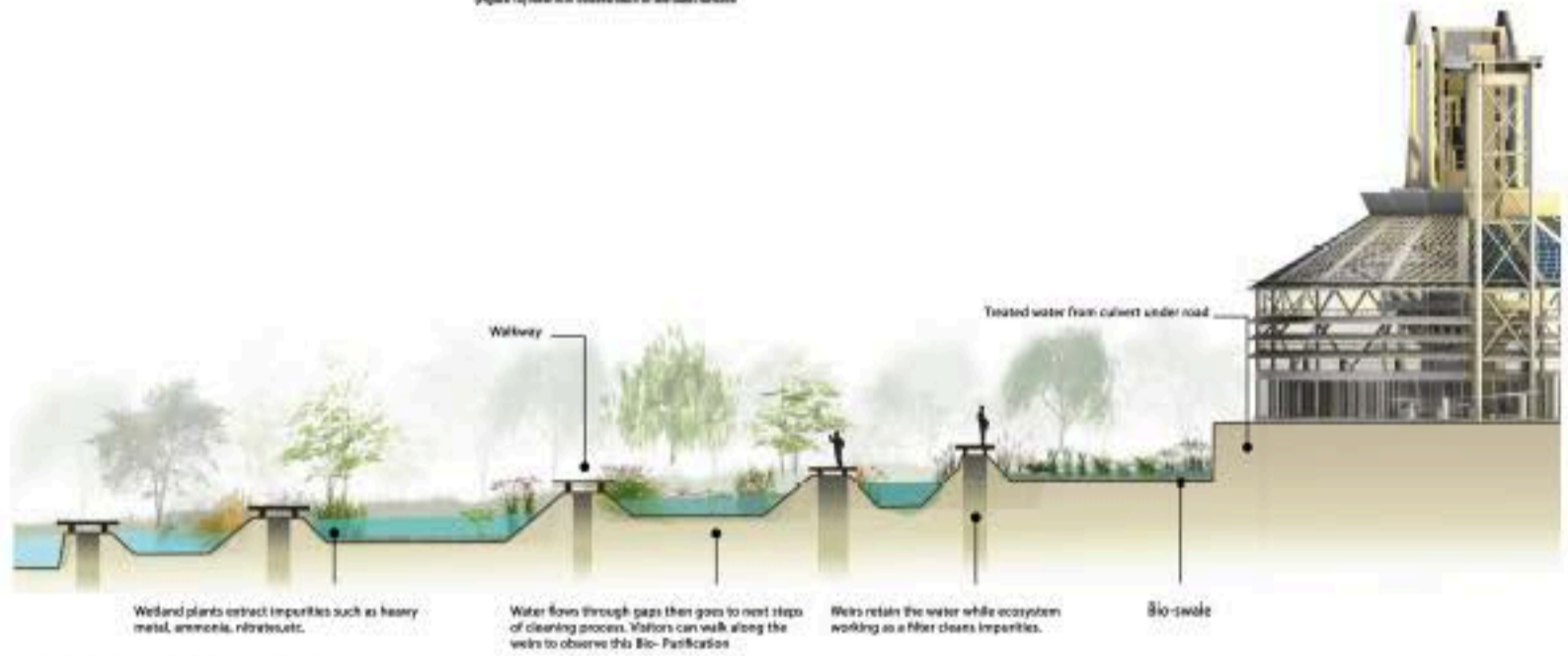


Figure 12) Cross-section grey water treatment system to Bio-swale area



Figure 13) Transition of the Shougang site facilitated by the integration of the environment



**Micro Tourism**  
Shougang FIF is tailored to the needs of the concept of micro tourism and visitors can easily participate in the Shougang-wide "two days, one night" stay which aims to promote short-term tourism.



**Entertainment**  
Shougang FIF combines education with entertainment. Rather than offering dry knowledge, our being dull amusement, its core will be to create a meaningful, touching and eye-widening experience.



**Sustainability**  
An exhibition center providing sustainability can only be successful, if the building applies sustainable concepts itself. The blast furnace uses cutting-edge technologies to minimize its carbon footprint.

## Reality - Part 1



01.04. Light Exhibition

01.15. Deforestation of Rainforest

01.16. Water Pollution

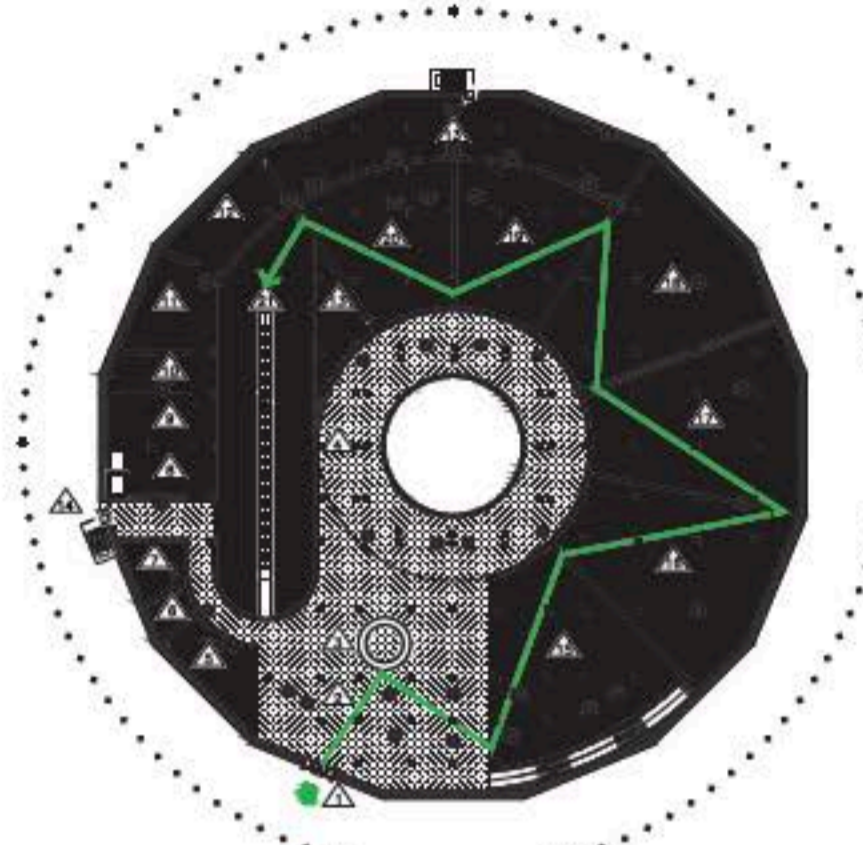
01.17. Ice Melt at the Poles

01.18. Sea Level Rise

01.19. Desertification

01.20. Exploitation of Earth

01.21. Ocean of Trash



## 01



First Floor Plan | SC 1:500

- 01. Main Entrance
- 02. Security Check
- 03. Ticket Office
- 04. Light Exhibition
- 05. Wardrobe
- 06. Men's Washroom
- 07. Women's Washroom
- 08. Staff Access
- 09. Office
- 10. CCTV Room
- 11. Control Room
- 12. Technical Support
- 13. Warehouse
- 14. Staff Entrance
- 15. Exhibition | Deforestation of Rainforest
- 16. Exhibition | Water Pollution
- 17. Exhibition | Ice Melt at the Poles
- 18. Exhibition | Sea Level Rise
- 19. Exhibition | Desertification
- 20. Exhibition | Exploitation of Earth
- 21. Exhibition | Ocean of Trash

## Future - Part 2



03.01. Workshop Area

02.08. Mirror | Deforestation

02.10. Mirror | Water Pollution

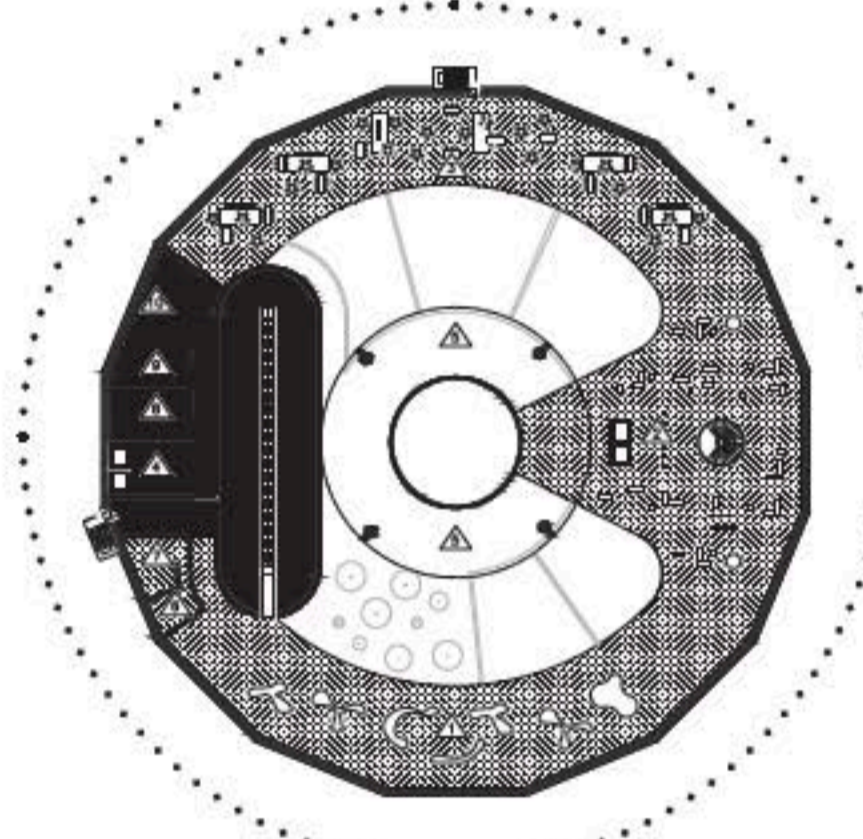
02.11. Mirror | Ice Melt at the Poles

02.12. Mirror | Sea Level Rise

02.13. Mirror | Desertification

02.14. Mirror | Exploitation of Earth

02.08. Foyer

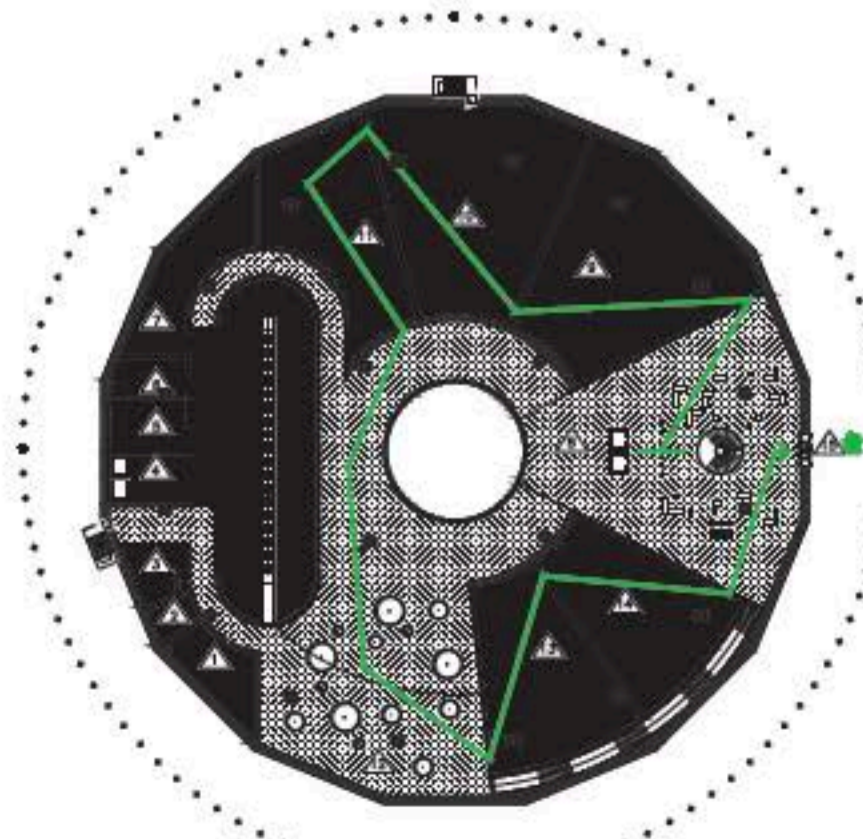


## 03



Third Floor Plan | SC 1:500

- 01. Workshop Area
- 02. Foyer
- 03. Library
- 04. Staff Area
- 05. Void
- 06. Men's Washroom
- 07. Women's Washroom
- 08. Office
- 09. Technical Support
- 10. Museum Storage

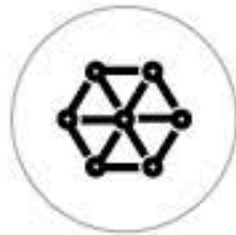


## 02



Second Floor Plan | SC 1:500

- 01. Photo Studio
- 02. Men's Washroom
- 03. Women's Washroom
- 04. Staff Access
- 05. Office
- 06. Technical Support
- 07. Museum Storage
- 08. Foyer
- 09. Minor Exhibition | Deforestation of Rainforest
- 10. Minor Exhibition | Water Pollution
- 11. Minor Exhibition | Ice Melt at the Poles
- 12. Minor Exhibition | Sea Level Rise
- 13. Minor Exhibition | Desertification
- 14. Minor Exhibition | Exploitation of Earth
- 15. Main Exit



Integration of surrounding space  
Representing a vivid and green surrounding, the space also demonstrates the future of water management. It shows how aesthetics and functionality can go hand in hand.



Talking through arts  
The exhibition center develops an own unique language of fine arts, which makes the visitor dive into a cosmos of metaphors, symbols and tangible poetry.



Guiding towards the future  
Shougang FYF does not only show the impact humanity has on environment protection, but its visitors will also learn how to get there by workshops and an extensive library.

### THE EXHIBITION

After passing the security gate at the main entrance, the visitors find themselves in the entrance hall where they can purchase tickets for the exhibition, bring their clothes to the wardrobe and visit washing rooms. If interested, the visitors can take a short look around the former furnace, getting an impression of the history of the site.  
Directly afterwards, they proceed to the main exhibition on the 1st floor in which they are guided through the disturbing appearance of 6 climate zones at how they will change after climate change and human impact hit them – each of them referring to one single environmental issue. Invited to touch, feel, smell, listen, interact and take pictures in this artificial cosmos of poetic though bitter abstraction, the visitors will follow along a path through a cleaned and dry rainforest, a polluted underwater area, an arctic setting that has long ago started to melt away, an evacuated coastal town in which people fled from sea level rise, a city close to the desert rim facing desertification and a coal mining area in which there is barely something left of what nature had once created.

At the end of the first floor, the visitors arrive at the

“ocean of trash”, a symbolic man-made dead end. In this atrium-shaped, long and spacious hall, there is only one single escalator going up towards the only exit of this misery: Following the rules of mother nature – a destination both meaningfully and conceptually integrated in the building’s architecture. While going up this escalator to the 3rd floor, the whole surrounding undergoes a notable change from pollution to sparkling cleanliness and blossoming.

Arriving on the 3rd floor, the visitors can look down into the 2nd floor’s safe and sound, undamaged ecosystems – which represent the same climate zones as presented on the 1st floor – while participating in a series of workshops showing simple measures everybody can take to preserve the natural beauty of the environment. The workshops are tailor-made to fit the environment presented on the 2nd floor. For interested visitors, there is also a library containing literature on environment protection, energy generation and related topics whose books wait to be browsed.

After learning about effective steps that help to protect our planet in the workshops, the visitors go downstairs to the 2nd floor where they can feel the heart of the exhibition centre: an artificial nature that invites to listen to

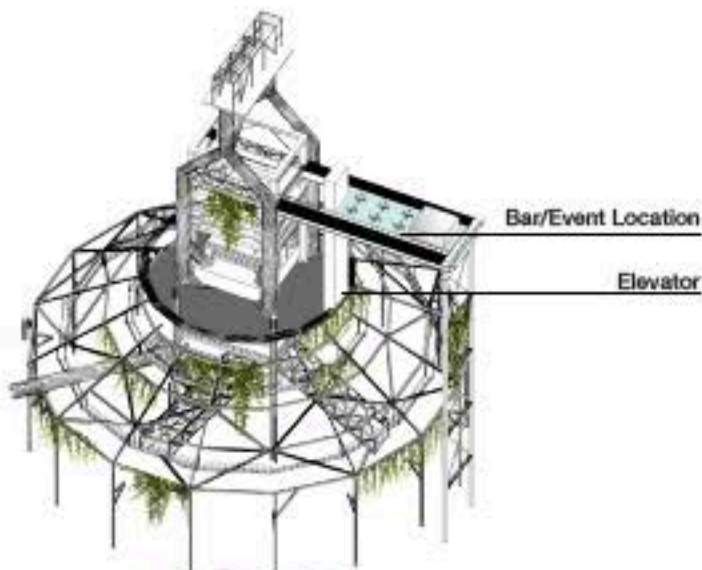
its sounds, feel its beauty and breathe the scent of functioning ecosystems. It is all very interactive and poetic, thus inviting to spend time there, feel the peace and be reminiscent of the way the same climate looked like on the 1st floor.

After the second floor, the visitors can either choose to go back to the entrance to pick up their clothes from the wardrobe, to go out to take a stroll on the tree walk which then leads the visitors to beautifully integrated gray water processing pools, or to go up to the 4th and 5th floor. The 4th floor houses a café with great view on the whole exhibition centre from the top, the 5th floor – located at the rim of the roof – is the “virtual reality walk”, in which the visitors have the chance to walk around the building with VR glasses and see how the surrounding looked like in the time of industrialisation when the whole Shougang Park was still actively producing steel. On the VR Walk visitors can travel back in time to experience and learn from the past.

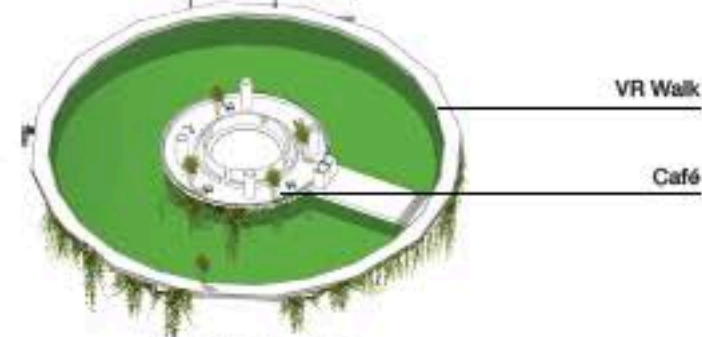
The 7th floor – the top platform – is an event location that houses a bar/restaurant which can be visited during the opening hours of the exhibition center and rented in the evening hours.

### EXPLOSION DRAWING OF THE FURNACE

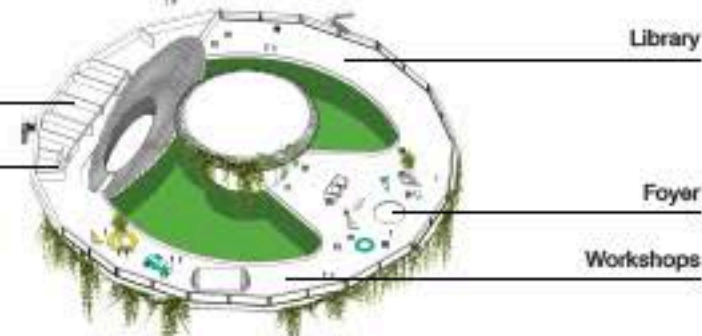
#### 6<sup>th</sup> Floor



#### 5<sup>th</sup> Floor



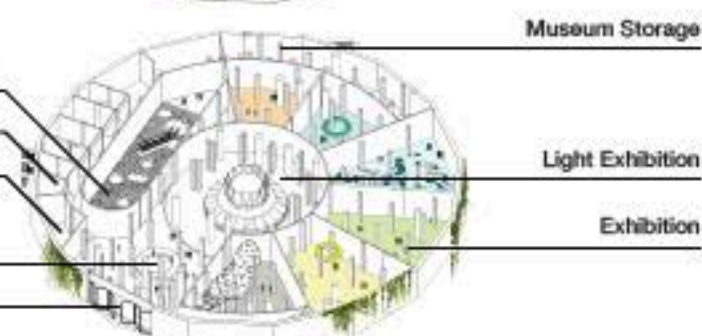
#### 4<sup>th</sup> Floor



#### 3<sup>rd</sup> Floor



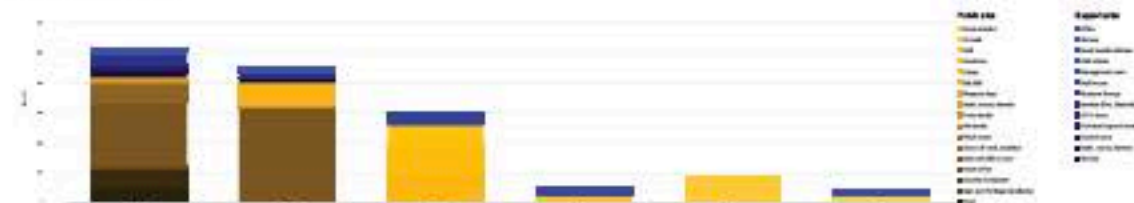
#### 2<sup>nd</sup> Floor



#### 1<sup>st</sup> Floor

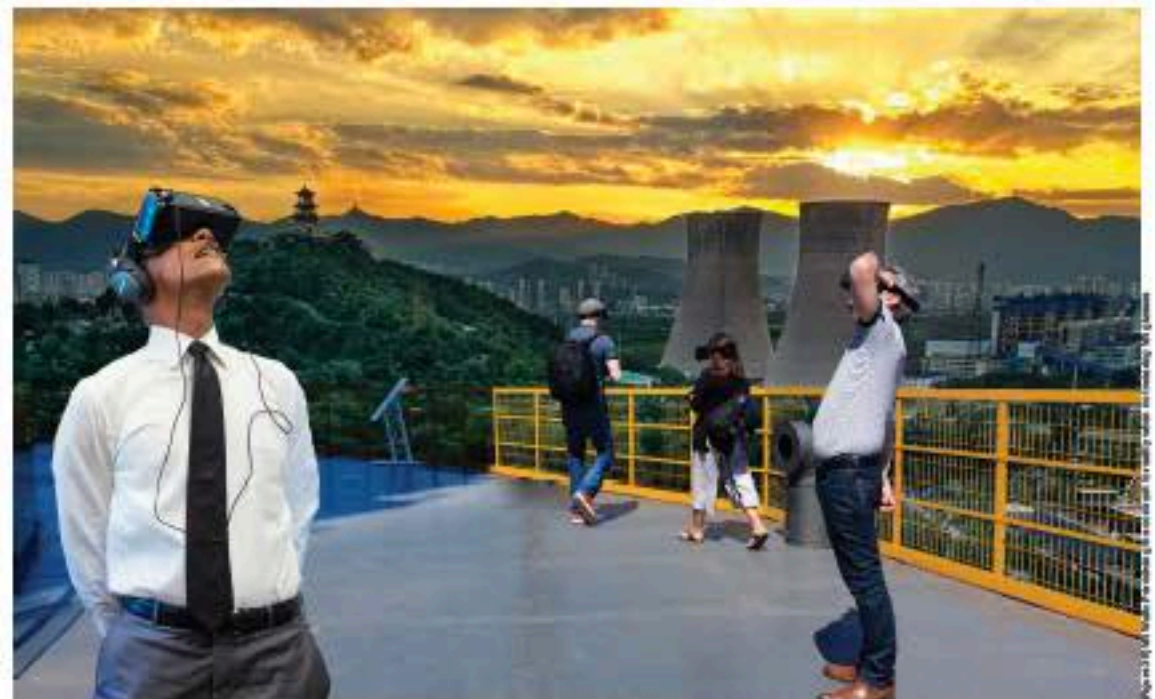
(Figure 01) Spatial distribution of the assigned functions of Blast Furnace No. 1 represented as an exploded drawing

### AREA CALCULATION



(Figure 02) Area calculation of the 6th Floor of the Furnace. Yellow areas represent public areas, blue areas represent support areas.

### VR WALK



### THE „OCEAN OF TRASH“

