Greening Shougang Factory:
A Global Sustainability Institute in Beijing

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SUSTAINABILITY 可持续发展

ENERGY: solar, wind, cooling / air-conditioning, ocean / wave / tidal, and geothermal

TRANSPORTATION: rail networks, smart bikes, other transportation alternatives

FUELS: hydrogen, other alternative fuels

CLEANUP AND POST-POLLUTION: toxics, industrial pollution (air, water, land)

FARMING / AGRICULTURAL 农业

WASTE MANAGEMENT: garbage, recycling, compost

ENERGY EFFICIENCY 能源效率
“manage the transition to new uses, preserving elements of the site’s past and creating a pathway for future generations to meet their needs”

首钢可持续发展的定义

旧为新用，保留场地的历史元素，并满足首钢和北京的未来发展需求。
SUSTAINABLE DEVELOPMENT AT SHOUGANG

1. Existing site features and landscape

设计策略

- Mountain Access
- Retreat Center
- Historic Buildings
- Tourism
- Education
- Transportation Hub
- Retail Hub
- Contaminated Land
- Railway Network
- Transport
- Water Conservation
- Wetlands

Tsinghua / MIT Beijing Urban Design Studio
2. New developments on site

Sustainable building design

Sustainable systems:

Water
Sewer
Waste
Transportation

Research institute: sustainable practices, green development

Flexible spaces for testing new technologies
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PHASING DEVELOPMENT AT SHOU GANG

RESEARCH/DEV. CLUSTER
SITE CHEMICAL CLEANUP

WETLANDS

VISITOR HUB
HOUSING

Tsinghua / MIT Beijing Urban Design Studio
PHASING DEVELOPMENT AT SHOUgang

Map showing the phased development of SHOUgang site, with areas marked for research/development clusters, chemical cleanup, wetlands, visitor hubs, housing, institute core, and university campus area.
BLAST FURNACE 四号高炉

Visitors Center for historical node 游客中心

Trolley connection (using existing train track) 电车站点

Exhibition space

Shougang 展示空间
Beijing history exhibitions

Viewing areas 观景空间

Cafe 咖啡馆

Rooftop deck 屋顶平台
TRANSIT HUB 交通枢纽
Beijing Subway Connection

Entrance to pedestrian area/ Western edge of site

Pathway to the wetlands
  pedestrian area
  western edge of the site

Commercial / Office / Residential

Commercial / MIT / Beijing Urban Design Studio
BENEFITS OF WETLANDS

wastewater treatment
stormwater or sewage treatment
biofilter for pollutants in water (including heavy metals)
habitat for wildlife
recreation
LOOKING AHEAD TO NEXT WEEK

GREEN BUILDING TECHNOLOGIES  绿色建筑

LEED STANDARDS  参考LEED标准

WASTE / RECYCLING / COMPOST SYSTEMS  废物回收循环利用系统

FURTHERING PLANS FOR:  校园区和厂区周边的深化设计
areas nearby to Shougang  校园区和厂区周边的深化设计
campus area