

Green Strategy Research on Industrial Project Case

工业项目中绿色建筑策略的研究



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Organisers:



International Co-owners:



Project Introduction



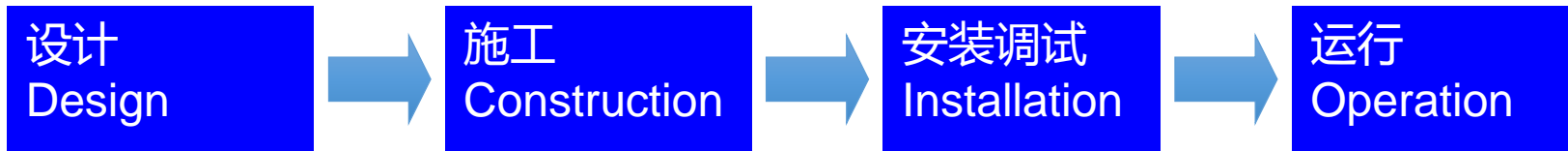
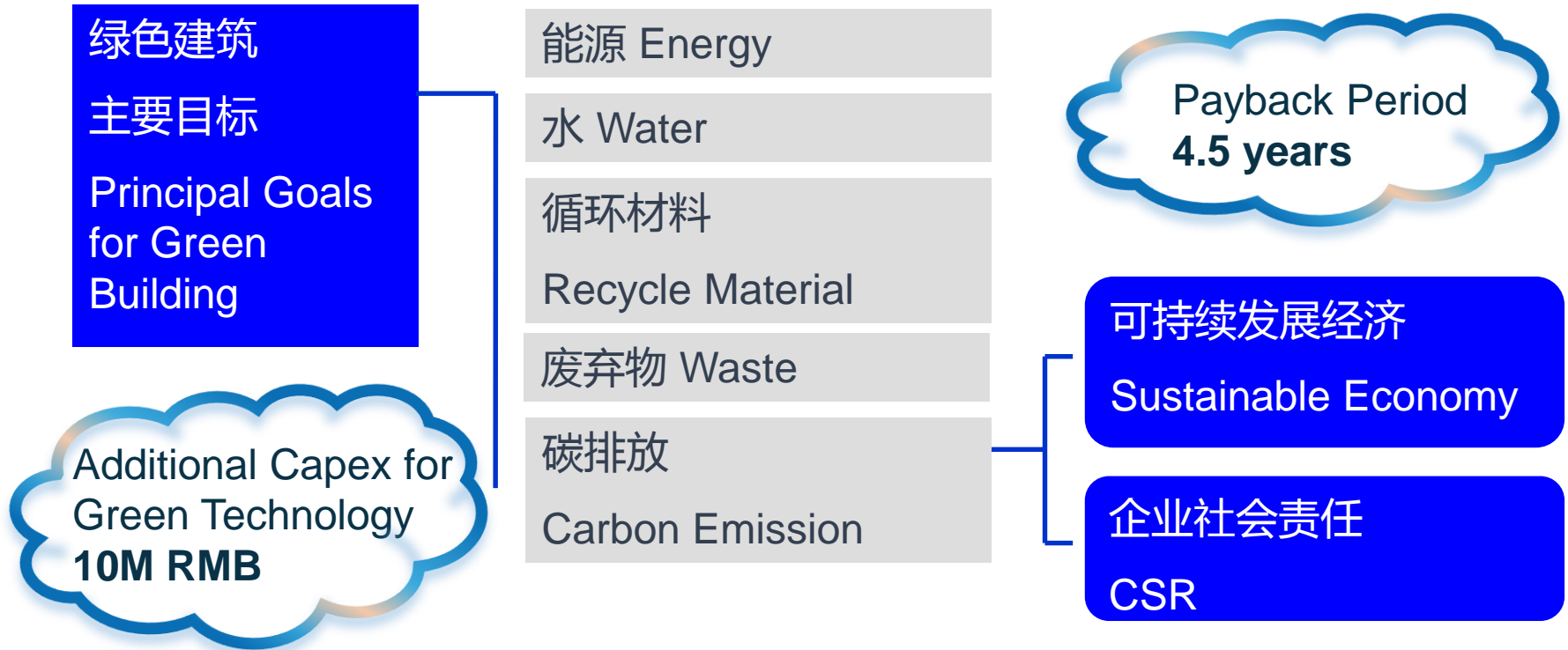
China Green Building Operation Certification



LEED Platinum/Gold



Main Target of Project



Selection of Green Strategy

Type of Green Strategy

被动型绿色建筑策略

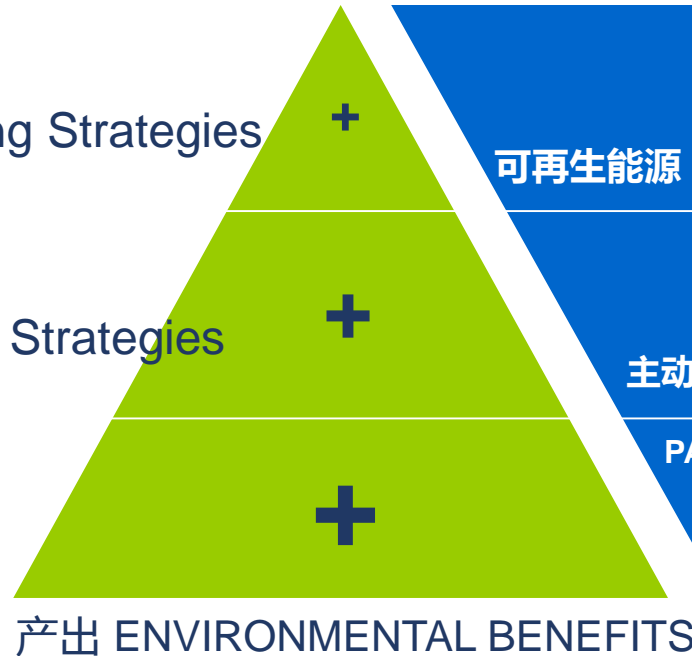
Passive Green Building Strategies

主动型绿色建筑策略

Active Green Building Strategies

可再生能源利用策略

Renewable Energy



投入 COST TO IMPLEMENT

Selected Direction

Principle to Choose Green Technology = Low or Zero Incremental Cost



International Co-owners:



CSR and Sustainable Development

Waste Collection

Identify main waste generate from manufacture process. Set regulation for collection, treatment and discharge to minimize environment influence. Harmful substance need store separately and keep certain distance from human activity area. People health need to be well considered such as noise, welding smog, paint mist, etc. Training and report system can support to improve situation continuously.



Welding Smog Absorption Apparatus



Recycle Waste



Welding Slag



Cleaning Cloth

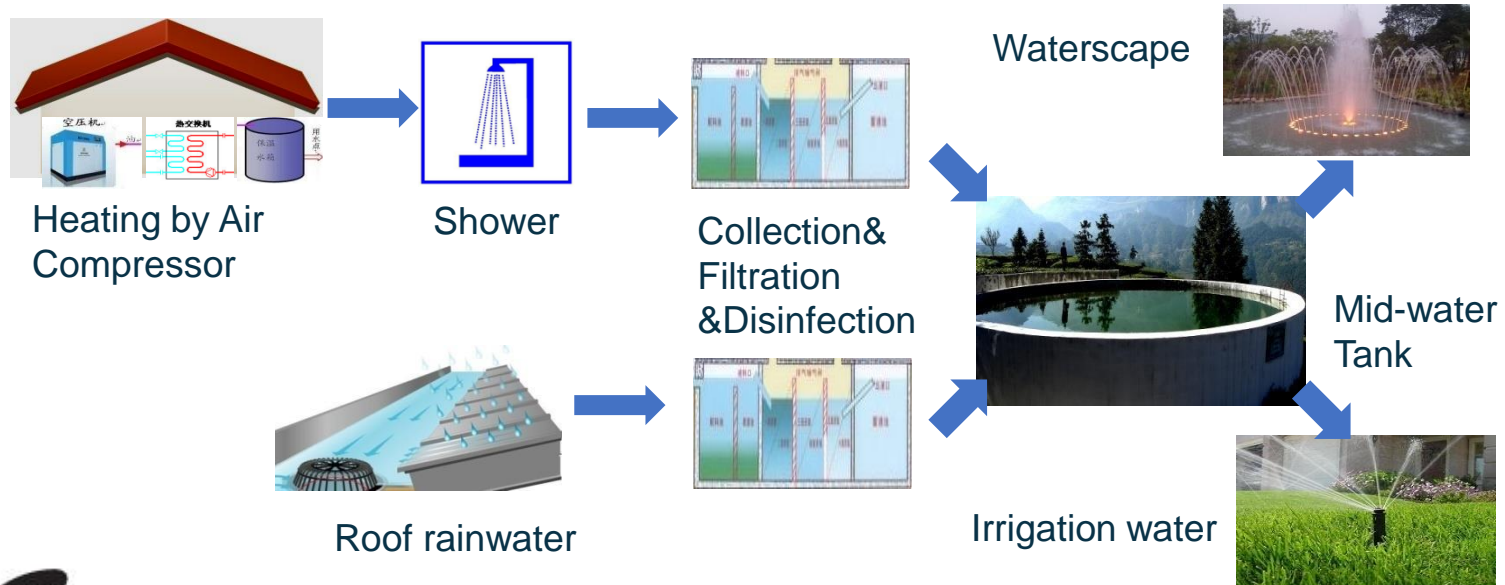


Steel Scrap

Integrative Process Example

Water Efficiency

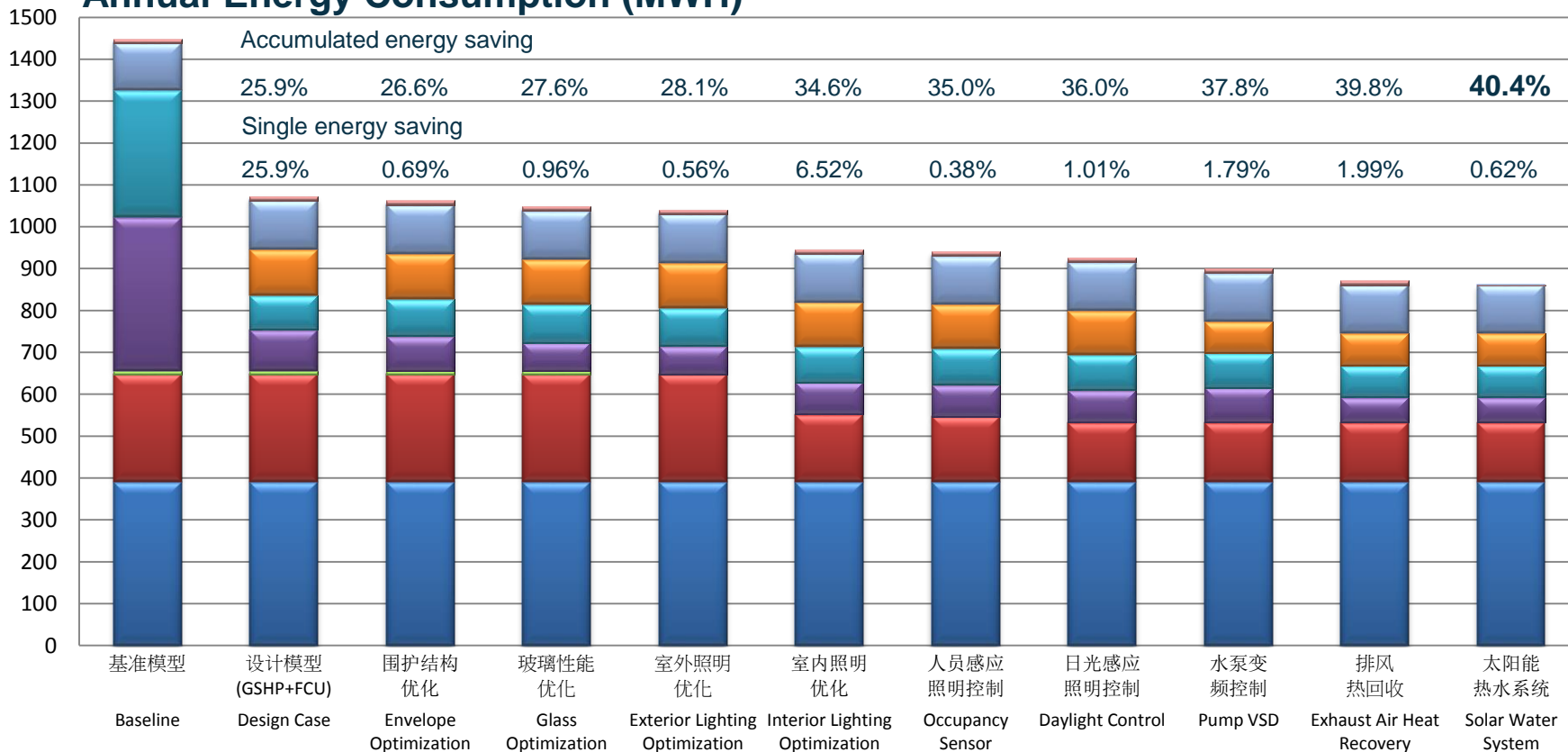
- Waste heat from manufacture line was collected to heat water for shower
- Rain water collection and bath water recycle to provide enough water for Landscaping and irrigation to save clean water
- Water-saving fixtures (3/4.5L Dual flush toilet, 0.5L Urinal, 1.9L/min Lavatory faucet, 6L/min Shower head) contribute to 40% annual indoor water saving.
- Native and drought-enduring plants used for landscaping



Energy-saving Contribution

- Baseline: Based on ASHRAE90.1-2007
- Design Case: Based on actual design Ground source heat pump + Fan coil units

Annual Energy Consumption (MWH)



■ 设备 ■ 室内照明 ■ 室外照明 ■ 供暖 ■ 制冷 ■ 水泵 ■ 通风 ■ 生活热水



Organisers:



International Co-owners:



Green Construction

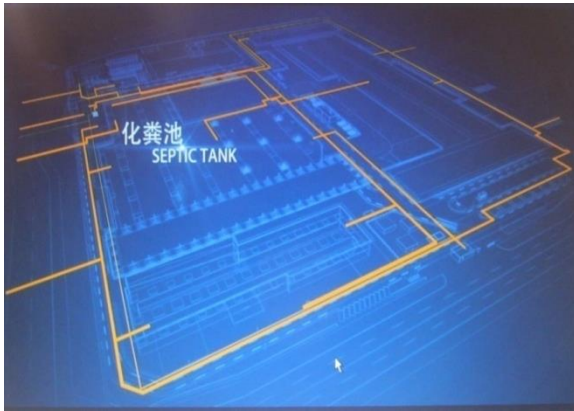
Environment Assessment

Investigate soil, water, air on project site to protect vulnerable population. Restore contaminant problem if any.

- Air Investigation
- Soil Investigation
- Ground water investigation
- Electromagnetic radiation investigation
- Geologic hazard identification



Green Construction



Rain & Sewage Pipe Preinstall



Temporary Cover on Soil



Temporary Landscape



Classified Waste Collection



Soil Erosion & Condensation Control



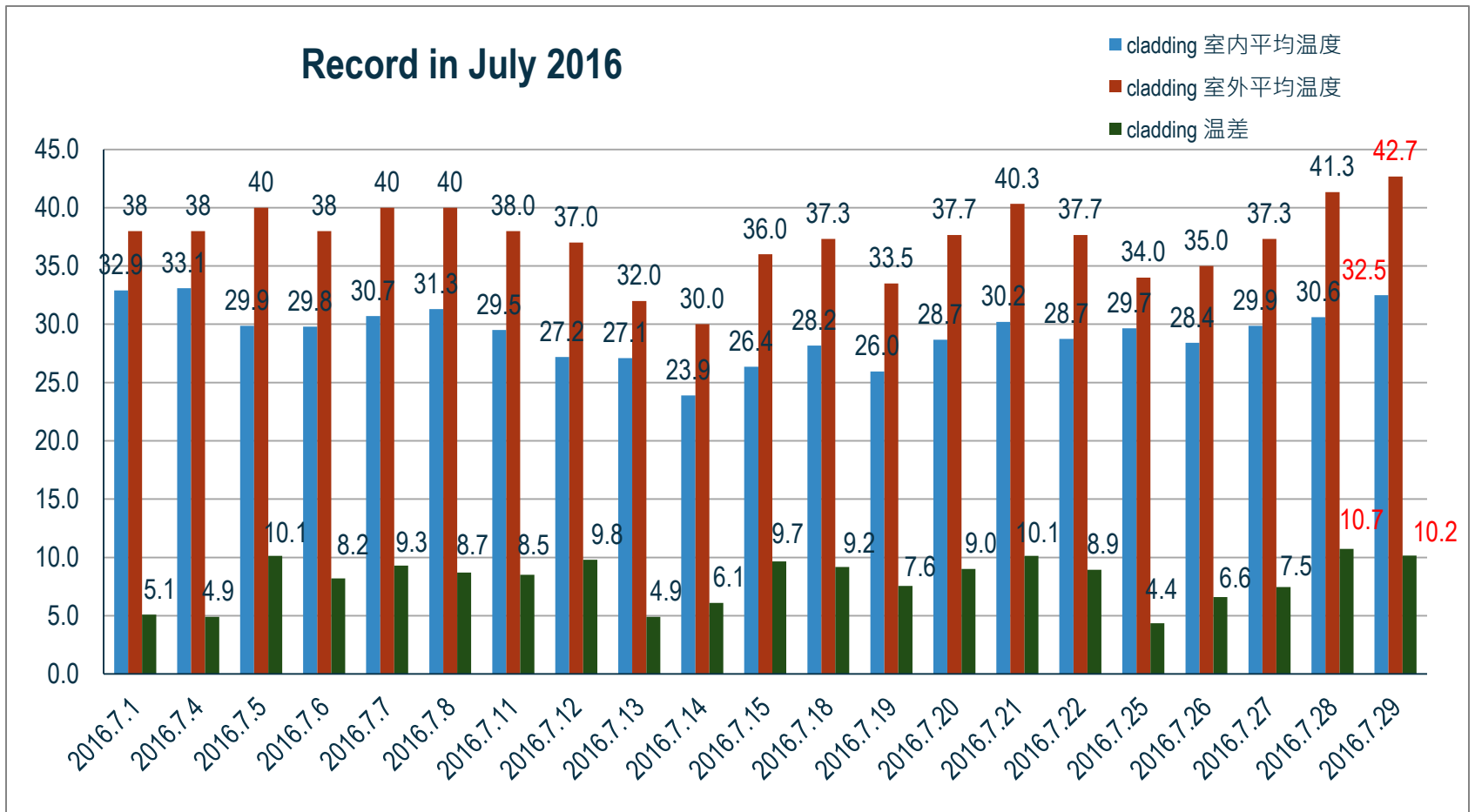
Dust Control



International Co-owners:



Interior Temperature Monitor



* Set 5 monitors in plant to measure temperature at 10am, 2pm and 4pm every day



Thank you



Organisers:



International Co-owners:

