



Project: ACCORD21 Demonstration Project—China Ministry of Science & Technology



Building Type: Office
Location: Beijing, China
Floor Area: 13,000 square meters
LEED Status: Gold
AST Staff Involvement: Heavy

Rob Watson coordinated green design element development and procurement for the project, China's first LEED Certified project and its highest rated. AST Engineer Jin Ruidong provided much of the LEED Documentation for the project. AST Senior Advisor Timothy Hui provided green project management.

Green Features:

Site/Land-use

- Existing building site near transit
- Porous paving to allow groundwater recharging
- 30 m² of rainwater cisterns for landscape watering and toilet flushing
- Roof garden planted with native plants

Water Quality & Treatment

- Water use reduction > 60%
- > 50% reduction in wastewater flow
- 5 liter pressure flush toilets, low flow faucets & waterless urinals
- Closed-loop efficient cooling tower

Energy

- > 60% energy savings (700,000 RMB/yr cost savings)
- PVs provide > 7% building electricity
- Lighting = 4 W/m²; HVAC capacity < 50% of typical building
- 80% waste heat recovery

Materials

- 75% demolition waste recycled
- Occupant recycling and separation facility on-site
- Non-toxic carpet and paints
- Fly-ash cement & porous paving bricks

Indoor Environmental Quality

- Daylighting and views for >90% of regularly occupied spaces
- Non-smoking building
- Air quality monitoring system
- Operable windows for natural ventilation