



## SIEEB (Sino-Italian Ecological and Energy Efficient Building)

Sino-Italian Ecological and Energy Efficient Building (SIEEB) is realised in the Tsinghua University Campus in Beijing. It is a 20,000-square-metre building, forty metres high and it will host a Sino-Italian education, training and research centre for environment protection and energy conservation.

The envelope components as well as the control systems and the other technologies are the expression of the most updated Italian production, within the framework of a design philosophy in which proven components are integrated in innovative systems.

The SIEEB building shape derives from the analysis of the site and of the specific climatic conditions of Beijing. Located in a dense urban context, surrounded by some high-rise buildings, the building optimises the need for solar energy in winter and for solar protection in summer.

Gas engines are the core of the energy system of the building. They are coupled to electric generators to produce most of the electricity required. The engines' waste heat is used for heating in winter, for cooling – by means of absorption chillers in summer and for hot water production all year round.

### 中意生态节能楼

中意生态节能楼位于清华大学的校园里，总面积为20,000平方米，有40米高，里面是中意合作开展的环保和节能教育、培训和研究中心。

建筑的外墙构成、控制系统和其他技术都采用了最先进的意大利技术，整体设计理念都以创新系统为主体。

中意生态节能楼的造型综合考虑了项目的地理位置和北京独特的气候特点。地处高楼林立的市区，建筑的设计优化了冬季的太阳能摄入量和夏季的日光防护措施。



内燃机是建筑节能系统的核心，它们与发电机相配合，提供了建筑所需的大部分电量。内燃机所产生的废热可用于冬季供暖，通过吸收式制冷机在夏季制冷，或是提供全年的热水供应。

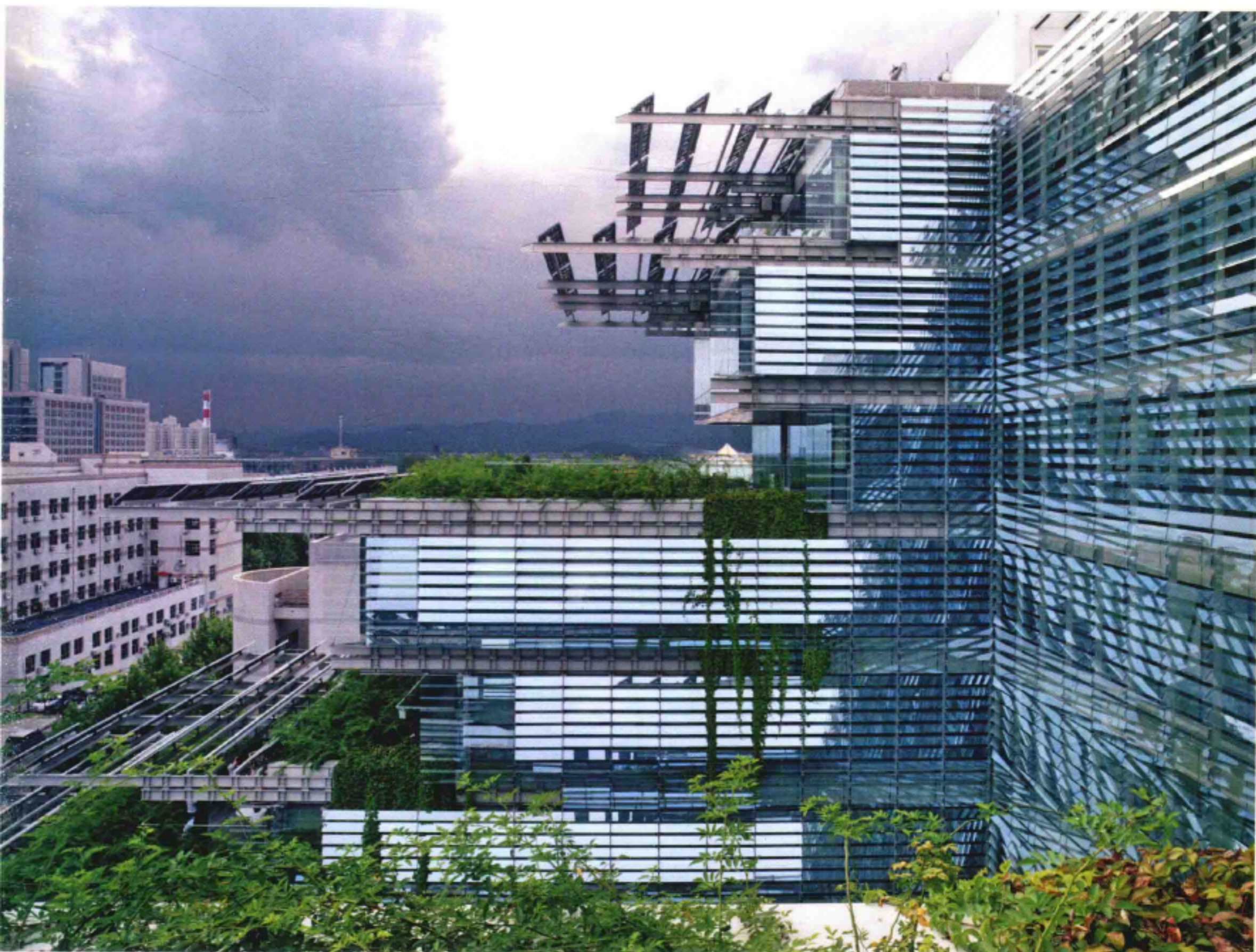
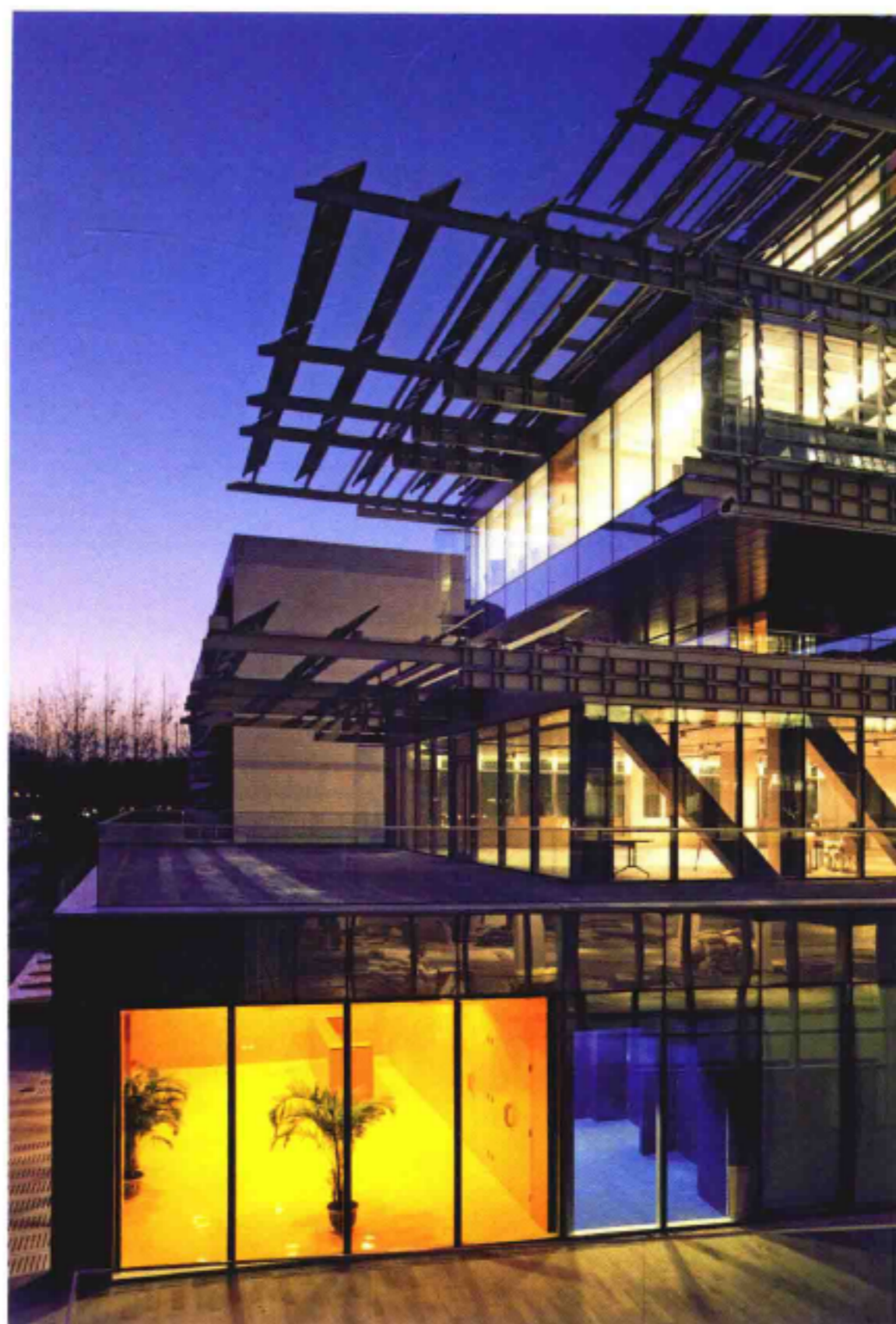


Photo: Daniele Domenicali, Alessandro Digaetano, MCA Archivi

Architect: Mario Cucinella Architects

Completion Date: 2006

Educational