Eco-Techno Park
Green building showcase and enterprise hub, Ankara, Turkey

Main authors
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Project data
Context Architecture, building and civil engineering
Client Ortadogu Sanayi ve Ticaret Merkezi (OSTIM)
Background Private investment
Planned start December 2014

Summary and appraisal by the jury
The jury greatly appreciated the project's objective to promote economic growth in the region through innovation in environmental technologies. The building is accordingly conceived as a test bed for sustainable research exploring new techniques pertaining to the use of renewable resources – energy for heating and cooling; rainwater retention; temperature control; daylight; and natural ventilation. At the core of the scheme is the intention to establish a careful balance between the natural and fabricated realm – an objective most clearly expressed in the project’s landscape strategy, which aims to integrate the building in its natural setting.

Sustainability concept
The project, designed at the intersection of the constructed and the natural, aims to leave most of the site green, therefore the hill on the site is used for housing offices, conference and workshop spaces. Designed to create a pleasant communal space for its users with minimum interference to the natural context, the project incorporates various sustainable features including natural lighting, geothermal heat pumps, green roofs, passive ventilation and water efficiency/irrigation systems.

Solar energy may not be sufficient for effective heating or cooling, however it can provide enough energy for geothermal heat pumps to function. The hybrid system will therefore resolve heating and cooling without any additional energy consumption.

Green roof: The green roofs of the terrace buildings contribute to the isolation of the building and to improved air quality, also assisting to lower air temperatures and combat the heat island effect. In addition, this design creates a continuation of natural texture throughout the site.

Ventilation: The corridor system on both sides of the office block creates a greenhouse effect in winter, thus contributing to heating, and also passive ventilation in summer. The corridor system on both sides of the office block creates a greenhouse effect in winter, thus contributing to heating, and also passive ventilation in summer.

Water: The water retained from the landscape will be purified by a simple mechanical filter and used for irrigation of the landscape with a high-efficiency drip-irrigation system.

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