



BRIDGING  
DIVIDES  
FOR WATER



## **Report - Green Team Sötlüce Forum Venue Tour – 04/06/08**

The tour began with an overview of site plans and facility drawings in the architect's office. Our hosts provided a comprehensive tour of the construction for 1hr 30 minutes that was focused on space layouts, energy and water use. Even though green building techniques were not included in the original designs, the building is relatively well outfitted with up-to-date technology and techniques for energy and water efficiency. The overall impression was that the facilities surpassed our expectations for sustainable systems.

Details of the building's characteristics are as follow:

- The renovation features extensive natural exterior finish materials, especially granite. However, for some reason, the granite has been sourced, not from Turkey, but from Brazil and Italy.
- Daylighting has been used extensively in entry hallways. This daylighting has been achieved using reflective and insulated glazing (glass) which allows a balance of natural lighting combined with minimal heat gain in the interior space. This reduces the amount of cooling energy required.
- In the entry halls and main circulation passages, lighting levels are monitored to maintain a specific level. If daylighting is good, the artificial lighting is automatically turned off.
- Artificial lighting is achieved with compact fluorescent T5 lighting. They are equipped with electronic ballasts. They are dimmable.
- The building is very well insulated.
- Glazing is used to separate main entry hall from meeting spaces – enabling zone climate control.
- Meeting room windows are double-glazed for energy saving. They can open for natural ventilation in cooler months.
- Rainwater is collected, but is not reused/harvested. The runoff water goes directly into the Golden Horn.
- Heated 'waste' air from the building is released into the parkinghouse underneath the building to eliminate the need for heating this space.
- Natural gas is used for boilers, heating.
- Building Automation Systems (BAS) other wise known as 'Intelligent building' systems are integrated. BAS core functionality keeps the

building climate within a specified range, provides lighting based on an occupancy schedule, and monitors system performance and device failures and provides email and/or text notifications to building engineering staff. The BAS functionality reduces building energy and maintenance costs when compared to a non-controlled building.

- Energy is saved by 'intelligently' measuring the needed amount of heating and cooling required based on occupancy; spaces are monitored in zones as sensors feedback information to the computer system. Building lighting is also automated based on occupancy.
- Kitchen and office equipment is low-energy (A+) rated (where applicable) and have energy saving features enabled.
- Chillers are free of ozone depleting substances (ODS).
- Oil traps are used to prevent used kitchen oil from going into the Golden Horn waterway.
- A series of smaller boilers are being used (as opposed to one large boiler that always needs to be heated) so that heating can be done in a modular way on an as-needed basis, reducing energy use. Heating is achieved with a dual system of natural gas and electricity.
- Water used in the building kitchens that must be of the highest purity comes from the municipal water system and is purified further using reverse osmosis and UV treatment and activated carbon filters to avoid that bottled water is required. Water for other uses does not go through this treatment process.
- Water saving flush system 3l / 6l are in use in toilets and infrared detectors are in place for the water taps.
- Lighting in low-traffic areas is all motion detected.
- Bus access is facilitated by an off-ramp from the main roadway. Parking space is limited so forum activities will depend on public transit and boat access for the majority of participants.
- Pop-up sprinklers are installed and are set on timers to allow for optimal irrigation of landscaped areas.

