

# **U.S. Embassy Goes Green Ecodiplomacy Latest Tool in Global Outreach**

**By KIRIT RADIA**



**March 20, 2007** — The American Embassy is often the United States' most visible symbol abroad — a brick and mortar gathering place for expatriates and a source of information for foreigners who wish to travel to the country.

Just as frequently, however, American embassies serve as rallying points for protests against U.S. foreign policy. In several extreme, tragic cases the embassies have also been the target of deadly attacks.

New guidelines for embassy construction meant to address security concerns have resulted in the building of embassies far from large population centers, behind tall walls and layers of security, adding to the perception that the embassies are cold, distant diplomatic fortresses.

The U.S. State Department is hoping that one of its newest embassies can buck that trend.

## **U.S. Embassy Goes Green**

The U.S. Embassy in Sofia, Bulgaria, is situated on a sprawling campus atop a high bluff offering views of the inner city and the surrounding mountains. It's bordered on the west by a large park and by a residential area to the east.

But it's what you can't see that the State Department hopes will boost the embassy's appeal, and inherently the U.S. image, among the host population.

Last week the Sofia embassy was the first U.S. Embassy to be designated a green building by the United States Green Building Council (USGBC), which awarded the embassy its Leadership in Energy and Environmental Design (LEED) certification.

The United States hopes that an environmentally friendly embassy will pay off as well in the public diplomacy department as it does for the ecosystem.

"It could be seen as an effort to build good will, to be less of an environmental intrusion," said Jane Loeffler, an embassy architecture expert and professor at the University of Maryland's Honors Program.

"It's a goodwill statement and you could say, in the broadest sense, it is part of the public diplomacy," she said.

To earn a "green" rating a building must score a certain number of points on the USGBC scale. In doing so the Sofia embassy reduced its overall water consumption by 21 percent and cut energy costs by about 30 percent. It also installed hepafilters that were 99.9 percent efficient, resulting in high air quality within the building.

"This is huge," Gen. Charles E. Williams, the director of all U.S. Embassies as the head of Overseas Building Operations for the U.S. State Department, told ABC News.

Williams pointed to five focus criteria during the embassy's construction: a sustainable site for the embassy, effective water use, a clean indoor working environment, effective energy use, and the use of local materials and resources in construction.

"Not only are we going to have safe and secure buildings that work," Williams said, "but they're going to meet design and sustainability credentials as well."

In order to reduce the amount of water used in the Sofia embassy, a high efficiency irrigation system was installed that reduced irrigation water use by 53 percent. Automatic flushers in the bathrooms also contributed to the overall drop in water consumption.

To prevent the excessive use of chemicals to treat its water, the Sofia embassy employed a system that sends pulses of electric current through the water to clean the water, resulting in fewer chemicals in the sewage runoff or evaporated in the air.

The embassy also cleaned up a toxic "brownsite" located on the grounds, removing harmful chemicals and paints, and treating the soil to remove contaminants.

Williams said the embassy had planted around 400 trees on the property to restore it to conditions before construction.

### **The Future of Ecodiplomacy**

The State Department hopes its embassy in Sofia will serve as a model for future embassies — fulfilling security concerns on the one hand while balancing environmental standards on the other.

"They're able to address green and security issues at the same time," said Tom Hicks, USGBC's vice president for LEED.

"This proves that they aren't mutually exclusive things, you can do both," he said.

"We're not just building structures around the world," Williams said, "we're building compounds that meet the security and sustainability standards and connect well with the populations that surround us."

The Sofia embassy is based on the Standard Embassy Design, a model for U.S. embassies initially heralded by Congress as a cost-effective solution to creating newer safer embassies after the 1998 bombings of U.S. embassies in Kenya and Tanzania.

To date, 42 embassies, including the U.S. Embassy in Sofia, have been built according to the Standard Embassy Design specifications, although the design has been criticized by some for resulting in stale buildings that do little to reflect their unique surroundings in each country.

Ultimately Williams says the goal is to achieve LEED certification for the Standard Embassy Design so that all future embassies will tread with the smallest possible environmental footprint.

By the end of fiscal year 2009 the State Department hopes to have 15 embassies certified as LEED Silver, an even stricter green certification than the one received last week by the Sofia embassy.

The impact of such green facilities may be most effective in countries with fragile ecosystems, scarce resources or poor infrastructure.

"Water is such an issue across the world," said Donna McIntire, the sustainability program manager for Overseas Building Operations, when explaining the need for sustainable structures. "Usually we have to treat our water on site, especially in a lot of areas of the world where there's not a lot of water."

McIntire said that the State Department was currently exploring how it could integrate solar panels, and was even studying the use of wind power in certain locations where electricity might be either expensive or unreliable.

In some cases around the world, U.S. embassies have already sought out ways to obtain power from renewable energy sources.

In 2005 the U.S. Mission to the United Nations in Geneva, Switzerland, was fitted with about 950 square meters of solar panels along its roof, walls and windows in order to reduce the building's energy costs by 20 percent.

Excess energy from the panels, which produce a total of roughly 366 kilowatt hours of electricity per day, is fed into the local power grid and used by consumers. The panels can power 37 "average homes for a year" at peak capacity, according to a State Department report.

In the end, this drive toward ecodiplomacy may be just one part of a larger function of future U.S. embassies.

"We want our buildings to be real U.S. showcases that make sense not only for diplomatic people but for everyone who pays taxes and to those where we are guests in their areas," Williams said.