

Green Refurbishment for value-secured offices

Dashwood House, London, U.K.

Green Refurbishment and four-story extension of office building

Environmental certification: BREEAM Excellent

Energy use: Reduced through solar panels for hot water needs

CO₂ emissions: 49 kg/sq. m/year (70–130 kg/sq. m/year in non-green buildings)

Water consumption: Reduced 60 percent compared to average building



Regulatory agencies are requiring increasingly strict environmental standards, and investors are more and more interested in properties with a green profile. Skanska has initiated a concerted Green Refurbishment effort targeting commercial properties and developing green turnkey solutions aimed at benefiting the environment as well as property value and operational economy.

Investors' interest in green properties is primarily based on the value trend. Green Refurbishment generates direct savings in operational costs, which also positively impacts the valuation of green properties.

Several surveys indicate that green and energy-efficient properties command higher value. In the U.S., green properties are sold at prices that are 13-percent higher than comparable non-green buildings, according to Eichholtz, Kok, Quigley: *Sustainability and the Dynamics of Green Buildings*, 2010. The value of LEED-certified properties also increases by 7.5 percent, according to McGraw-Hill Construction, *Key trends 2008*. Future-oriented companies are demanding green premises to make them more attractive to employees and customers.

Green Offerings

The Green Offering to customers contains various levels of action – from a complete and extensive renovation, to an upgrading of tenants' premises only or an optimization of operating systems. Using improved control and steering instruments for more efficient property operation, it is possible to offer customers guaranteed energy performance during operation of the property.

Green Refurbishment focuses on commercial properties in the U.S., the U.K., Sweden, Norway and Finland.

Major potential in existing buildings

The market potential is considered to be extensive. The built environment accounts for about 40 percent of man-made greenhouse gas emissions, and existing properties that are not constitute around 99 percent of buildings in our home markets.

Skanska strives to create properties that minimize emissions, waste, and energy and water consumption in both the production and operational stages.

25 percent better than the norm

One of the pilot projects concerns an extensive upgrading of one of Skanska's offices in Malmö. The property is being transformed into an energy-efficient demo facility with control equipment for lighting, heating, cooling and ventilation, and a superordinate system for data management. The property will be EU GreenBuilding-certified, entailing energy needs that are at least 25-percent lower than norms set by the National Swedish Board of Housing, Building and Planning.

Green projects in the U.S. and Europe

Skanska's Green Refurbishment of the company's U.S. office on the 32nd floor of the Empire State Building in New York has reduced its energy needs by 57 percent compared to its benchmark. The office has achieved Platinum rating, which is the highest level of the international LEED green building certification program.

Skanska's offices in Malmö, Seattle, Orlando, Tampa, Atlanta and Rockville, Maryland, have also undergone LEED-certified Green Refurbishments. The offices in New Jersey and Colorado have installed solar panels for energy supply.

See also www.skanska.com/sustainability