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# Sello Shopping Mall – putting energy savings back into your facility

Energy Performance Contracting increases comfort and yields substantial savings in operating costs.

In 2010, Sello was the first shopping mall in Europe to receive Gold Level LEED Certification and to win the EU's European Energy Service Project Award. Siemens helped with Energy Performance Contracting including building automation system's modernizing, remote analysis and optimization.

## The building

Sello is one of Scandinavia's largest shopping malls. The 102,000 m<sup>2</sup> complex houses more than 170 stores, supermarkets, restaurants, entertainment attractions, and even a concert hall and a library.

Located near Helsinki, the mall has 18 million visitors per year. Thanks to excellent connections to public transportation, 30,000 people take the bus or train every day to shop at Sello.

## The challenge

Achieving substantial energy savings and permanently improving the indoor air quality were the main objectives of this project. In addition, efforts needed to be made to ensure that the technical resources are used as energy-efficiently as possible at any time, given the significant fluctuation in the number of people present in the mall throughout the day.

Successfully completing the required measures was the prerequisite for the desired LEED (Leadership in Energy and Environmental Design) Certification, one of the most recognized standards for green buildings.

Answers for infrastructure.



1.25 million  
kWh electricity

€133,000  
energy costs

1.3 million  
kWh thermal energy

#### The solution

To achieve the desired energy savings, the Sello Shopping Mall optimized its building performance. The comprehensive modernization reduced operating costs and increased the value of the property.

To meet the objectives, the mall enhanced its existing building management system to facilitate the use of energy saving measures. In conjunction with the technical improvements, the system has improved air quality and lowered energy consumption by up to 50%.

To be able to continuously optimize all parameters, the building management system is connected to an Advantage Operation Center. Specialists evaluate the data from the Energy Monitoring and Controlling software. If needed, they adjust the settings remotely.

These integrated measures created the foundation for operating ventilation and air conditioning systems with maximum energy efficiency. The Sello service staff was trained to optimize the ongoing

maintenance of the technical systems. To ensure the economic success of this project, Siemens issued a savings guarantee as part of an Energy Performance Contracting agreement and pre-financed the required investments. This agreement guarantees the mall annual savings of at least 1,250,000 kWh of electricity, 1,300,000 kWh of thermal energy and 536 tons of CO<sub>2</sub>, corresponding to a reduction in energy costs of €133,000 a year.

During the term of the Energy Performance Contract both sides agree on the amount of savings that is used to pay off the investments; further saving surpluses are shared. After the agreement has ended, all the savings will go to Sello. An attractive perspective for Sello as the defined payback period is only four years and as additional energy services can ensure ongoing savings.

Successful LEED certification and the energy savings and air quality improvements achieved have convinced the owners of the Sello Shopping Mall to make similar upgrades to their other properties.

#### Highlights

- Up to 50% reduction in energy consumption
- Annual savings of at least €133,000
- Increase in value through modernization
- Investments amortized through savings
- No financial risk thanks to guaranteed savings
- Guaranteed financing through Energy Performance Contracting