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# EU recognizes Siemens and city of Sosnowiec for energy efficiency

## Successful public/private collaboration improves energy performance at 87 schools.

Energy performance optimization of 87 public schools and pre-schools and implementation of a remote monitoring and control system in under 10 months, with a 10-year savings guarantee, and without closing the schools.

Siemens won the 2015 European Energy Service Award (EESA) in the category "projects" for its implementation of an Energy Performance Contracting (EPC) project in the Polish city of Sosnowiec. The award was received by Marek Tobiacelli of Siemens Poland in Brussels on the 9th November 2015.

### A benchmark in regional sustainability improvements

The European Energy Service Award (EESA) is part of the European Energy Service Initiative toward the EU 2020 Energy Saving Targets (EESI 2020). This initiative aims at fostering the use of Energy Performance Contracting in Europe. The EESA honors outstanding efforts and achievements in the field of energy services in Europe.

The 10-month project was recognized for the significant savings it delivers, but also as a benchmark in supporting cities' energy consumption and $CO_2$ emissions reductions through public/private partnerships and Energy Performance Contracting. It is hoped the award and the project's visible environmental and social impact will spur other Polish cities and municipalities to adopt similar programs and financing models, which are seen as key to supporting a faster, more sustainable development for Poland in general.

### Improving the learning environment while reducing energy costs

Energy costs ran high across the 87 schools and pre-schools of Sosnowiec, due to classroom temperatures that were generally too high and hard to control at room level. This also had a direct negative impact on pupils' performance, who found it difficult to concentrate in over-heated rooms.

For the authorities of Sosnowiec, it was clear that a complete refurbishment of the schools' systems was required, to optimize both their energy operation and management. However, it also had to deliver results fast, be scalable to other facilities in the near-future and be financially feasible – all without any interruption to schools' operations or safety risks to pupils.

### Ambitious goals matched by energy project and service expertise

In only 10 months, all 87 schools and pre-schools had to be technically modernized, and a single remote monitoring and control system had to be implemented to provide full energy data transparency across all schools.

**www.siemens.com/bt/references/sosnowiec**

The award ceremony took place in Brussels on November 9th, 2015.

"This project, and the award it won, is again testament to how public/private partnerships and Energy Performance Contracting, with the right partner, can help Cities and Municipalities overcome budget constraints to decouple urban growth from its environmental impact – and lead the transition towards sustainable urban development" says Marek Tobacielli.

"Successfully implementing a project of this scale, within very tight operational parameters and with such ambitious goals requires more than a technology overhaul. We set a comprehensive framework encompassing systems retro-fitting, modernization and optimization of course, but also answered the municipality's high expectations for speed and results with an outcome-driven financing model", says Marek Tobiacelli.

The project focused on heating and lighting efficiency, and energy management in the schools and preschools. The heating and lighting systems in all buildings were modernized from the ground up within the target 10-month schedule. In addition, the Siemens webbased service platform Navigator was installed to remotely monitor and report on the schools' overall energy consumption. The system also allows personnel to remotely control the room temperature in every classroom and set it to the desired target value to maximize comfort and efficiency.

## Cities and municipalities as efficiency improvement champions

The efficiency improvement measures are financed through an Energy Performance Contract with Siemens, within which the investment costs are paid through guaranteed cost savings over the term of the contract.

In this case, Siemens has guaranteed heating cost savings of approximately 31 percent, electricity savings for lighting of 21 percent and a reduction of $CO_2$ emissions by 5,220 metric tons per year.

Solutions and services
- Energy Performance Contracting
- Modernization of heating systems and substations
- Lighting modernization
- Installation of a remote room temperature control system
- Implementation of the Siemens webbased service platform Navigator

## Highlights

- 31% heating cost savings
- 21% electricity savings (lighting)
- 5,220 metric tons $CO_2$ emissions reduction per year
- Energy performance optimization of 87 public schools
- Energy Performance Contracting with interim financing

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